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Metro | *Agenda*

Meeting: Transportation Policy Alternatives Committee (TPAC)
Date: Friday, March 1, 2013
Time: 9:30 a.m. to 12 p.m. (noon)
Place: Metro, Council Chamber

9:30 AM	**1.**		**Call to Order and Declaration of a Quorum**	**Elissa Gertler, Chair**
9:35 AM	**2.**		**Comments from the Chair and Committee Members** • Proposed Transportation Control Measure Substitution Strategy • State Transportation Improvement Program Enhance Committee Update • Update on Regional Transportation Plan Project Amendment Requests • Recommended Expressway Classification Modifications • Regional Travel Options Grant Process Update • Next TPAC meeting scheduled for March 22	**Kelly Brooks, ODOT**
9:50AM	**3.**		**Citizen Communications to TPAC Agenda Items**	
9: 55 AM	**4.**	**	**Consideration of the TPAC Minutes for Jan. 25, 2013**	
10 AM	**5.**	*	Climate Smart Communities Scenarios Project: Investment Choices – INFORMATION/DISCUSSION • *Purpose*: Present 2012 accomplishments and investment scenarios proposed for evaluation this summer. • *Outcome*: Understanding of how the investment scenarios have evolved since 2012 and 2013 milestones.	**Kim Ellis, Metro**
10:50 AM	**6.**	*	Household Travel Survey – INFORMATION • *Purpose*: Update TPAC on the results and model enhancements from the 2011 Household Travel Survey. • *Outcome*: Ensure TPAC is informed on the survey results and timeline and scope of upcoming travel model enhancements.	**Mike Hoglund, Metro** **Bud Reiff, Metro**

Continued on back…

11:30 AM **7.** * Presentation of Projects Requested by ODOT for Amendment into the Regional Transportation Plan – INFORMATION — **Rian Windsheimer, ODOT**

- *Purpose*: To inform the committee of the anticipated effects of ODOT's proposed Auxiliary Lanes.
- *Outcome*: TPAC is informed.

12 PM **8.** **ADJOURN** — **Elissa Gertler, Chair**

* Material available electronically.
** Material will be distributed in advance of the meeting.
# Material will be distributed at the meeting.

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: kelsey.newell@oregonmetro.gov.
To check on closure or cancellations during inclement weather please call 503-797-1700.

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2013 TPAC Work Program
2/21/13

March 1, 2013 – Regular Meeting • Household Travel Survey – Information • Climate Smart Communities Scenarios project – Discussion on Investment Choices • Presentation of Projects Requested by ODOT for Amendment into the Regional Transportation Plan – Information	**March 22, 2013 – Regular Meeting** • Transit funding and the MTIP Process – Discussion • Climate Smart Communities – Health Impact Assessments • Climate Smart Communities Scenarios project: presentation on the scorecard workshops – Information/discussion
April 26, 2013 – Regular Meeting • Transportation Alternatives Program (TAP) funding administration	**May 31, 2013 – Regular Meeting**
June 28, 2013 – Regular Meeting • RFFA Step 1 Region-wide programs	**July 19, 2013 – Regular Meeting** • STIP Enhance Committee process
Aug. 30, 2013 – Regular Meeting • RFFA project narrowing process	**Sept. 27, 2013 – Regular Meeting**
Oct. 25, 2013 – Regular Meeting	**Nov. 22, 2013 – Regular Meeting**

Parking Lot:

- Metropolitan Planning Area boundary update
- Travel model update
- Streetcar Methods
- Portland Metropolitan Scenario Planning Rule update

Oregon
John A. Kitzhaber, M.D., Governor

Department of Transportation
Transportation Development Division
555 13th Street NE, Suite 2
Salem, OR 97301-4178
Phone: (503) 986-4121

DATE: February 11, 2013

TO: ODOT Area Managers, Area Commissions on Transportation (ACTs) Chairs, Advisory Committee Chairs, and Interested Stakeholders

FROM: Erik Havig, Manager
Planning Section

SUBJECT: Recommended Expressway Classification Modifications

The Oregon Department of Transportation (ODOT) is recommending modifications to the highway classification of several state highways within Oregon that are designated expressways. These recommendations will be discussed with the Oregon Transportation Commission (OTC) at their March 20, 2013 meeting in Salem. At that time the OTC will hold a public hearing on the proposed changes. The OTC is expected to take final action at their April 17, 2013 meeting. The OTC final action will be an amendment to the Oregon Highway Plan (OHP) modifying the list of state highway segments with the Expressway overlay designation.

ODOT Region staff developed a list of recommended expressway segments that should be considered for reclassification. This list was created during the fall of 2012, when ODOT staff worked with affected local justifications to assess the current and planned function of existing expressway designated highway segments. This list is now available for public review and comment and will be presented to the OTC at its public hearing on March 20, 2013.

The concept for reviewing expressway designations came from an Access Management Stakeholder Committee (AMSC) comprised of 25 participants from a cross section of stakeholder groups, including legislators, private development and business interests, local governments and freight and transportation interests. This committee was formed in response to SB 1024, which directed ODOT to modify the agency's access management rules and standards. The outcome from this committee's work was SB 264. Included in this legislation was a requirement that ODOT review the existing state highways with expressway designations. The intent of this requirement was to ensure the designation is still appropriate given changes that may have occurred since the original designation over 10 years ago.

Expressways are intended to give priority to the efficient movement of people and goods traveling through an area within specific segments of a highway. This is achieved by limiting access and turn movements on the highway facility, allowing for higher speeds and smooth flow. The Expressway designation is one of a subset of highway classifications defined in the OHP.

It is important to reach out to your ACTs, Advisory Committee members, and other stakeholder parties as part of the outreach process during the next two months to provide an opportunity to ask questions and receive comments and feedback. Included in this packet are the following materials:

- A short description of the definition and purpose of the Expressway designation (the same single page document we sent to the Regions).
- A spreadsheet listing all the existing expressway highway segments with recommended actions.

Recommended actions can either remove the expressway designation to a portion or the entire segment, retain the existing designation as is, or add the expressway designation to a portion of a state highway that now meets the definition and intent.

In an effort to minimize paper copies of maps depicting the expressway segments, ODOT has developed a simple GIS based tool that can be accessed through the internet to visually review the recommendations. Your local ODOT Regional staff can assist in helping you utilize this tool. The tool can be accessed at:

http://wddotappl22.odot.state.or.us/expressway_review/review/

Comments and feedback to these recommendations is valued by the OTC. Please e-mail any comments or feedback to Nancy Murphy at nancy.e.murphy@odot.state.or.us. All comments and feedback received by March 15, 2013 will be collected and presented to the OTC at their March 20, 2013 public hearing. The public comment period will close Wednesday April 3, 2013.

This letter and all the information materials discussed can also be found on the ODOT Planning Section Web site: http://www.oregon.gov/ODOT/TD/TP/Pages/Expressways.aspx.

Thank you.

Purpose of Expressway Designations on State Highways

Streets in local communities serve two sometimes conflicting purposes: providing local access and connecting local destinations to the outside world. Expressways are routes intended to make the connection between a city and other destinations more efficient by ensuring moderate to high speeds of travel with minimal conflicts from entering or cross traffic. They also serve the purpose of keeping trucks and other vehicles that don't have local business off of local streets.

Features to support the functions of an expressway may be implemented over time on an existing roadway or in construction of a new expressway. Modernization of an expressway will typically include nontraversible medians. Parking, bicycle lanes and pedestrian ways are not appropriate on expressways.

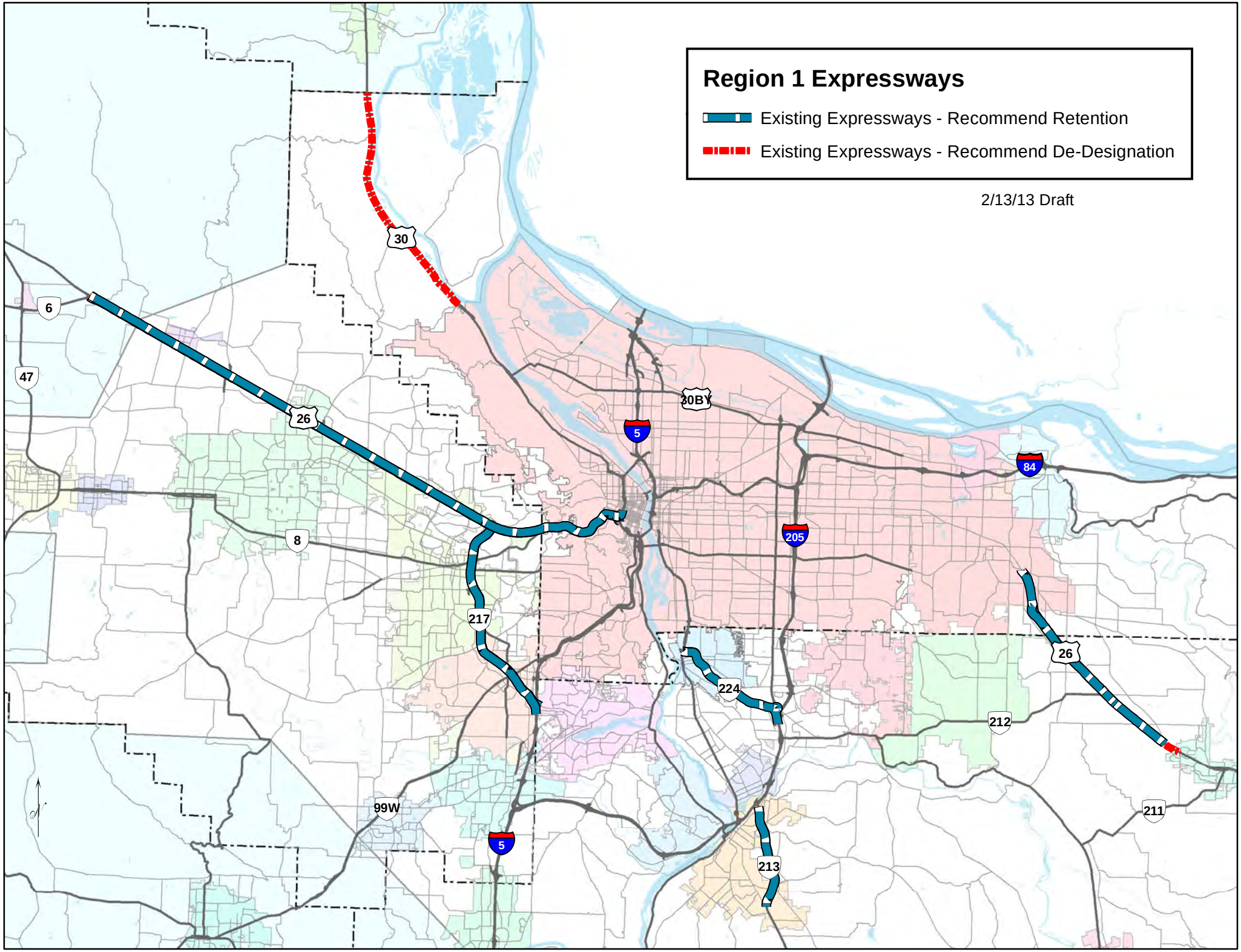
The main trade-off locally is that direct access to the facility will be limited. Local connections to expressways are meant to be public streets, particularly arterials; private connections are discouraged and intended to be phased out as other connections to the local street network become available.

The table compares the access spacing standards and mobility targets for expressways with other similar functional classes. The spacing standards are intended to get to free flow travel conditions much like an Interstate highway. The mobility standards are the same for Expressways, Interstates and Freight Routes.

Comparison of Expressway Standards with Other Statewide Highways

	Spacing Standards (feet)						Mobility Targets		
	Inside Urban Growth Boundaries			Outside Urban Growth Boundaries			MPO	Non-MPO, non-freeway >= 45 mph	Rural Lands
	Posted Speed								
	55 or higher	50-55	40-45	55 or higher	50-55	40-45	Volume to Capacity Ratio[1]		
Interstate	2640	2640	2640	5280	5280	5280	.85	.8	.7
Expressway on State Highway	2640	2640	2640	5280	5280	5280	.85	.8	.7
State Highway (not a Freight Route)	1320	1100	800	1320	1100	990	.9	.8	.7
Freight Route	N/A	N/A	N/A	N/A	N/A	N/A	.85	.8	.7

[1] A lower number denotes a higher standard. In other words, the acceptable volume of traffic relative to the capacity of the highway is lower for higher classification highways to support safety and efficiency at higher speeds.


Region 1 Expressways
Existing Expressways - Recommend Retention
Existing Expressways - Recommend De-Designation
2/13/13 Draft
30
6
47
26
30BY
5
84
8
205
217
224
26
212
99W
5
213
211

OHP Expressway Review
Final Draft Changes

Action	Route No.	Hwy No.	Highway Name	Begin MP	End MP	ODOT Region	General Description/Notes
Remove	US 30	92	Columbia River Hwy	9.98	18.37	1	Portland UGB at Miller Cr to Watson Rd./Multnomah County boundary. Remove complete segment in Multnomah Co.
Remove Portion	US 26	47	Mt Hood Hwy	14.18	22.74	1	Remove portion from Burnside, Gresham to 362nd, Sandy - Orient Dr (MP 22.15) and SE 362nd Dr (MP 22.74). Retain expressway designation on remainder.
No Change	OR 224	171	Milwaukie Expressway	0.11	4.36	1	Milwaukie, Clackamas County
No Change	OR 213	160	Cascade Highway S.	0.00	3.59	1	Oregon City to Molalla, Clackamas County
No Change	OR 217	144	Beaverton-Tigard	0.00	7.52	1	I-5 to US 26, Washington County
No Change	US 26	47	Sunset Highway	53.51	73.81	1	From Tillamook Hwy. (OR 6) west of North Plains to I-405 in Portland
Remove Portion	OR 22	162	North Santiam	1.21	20.51	2	Remove portion between 12th St and Airport Rd - MP 6.20 to MP 7.29. Retain expressway designation on remainder.
No Change	OR 22	72	Salem Highway	0.00	3.16	2	Salem Parkway in north Salem connecting I-5 and Downtown Salem.
No Change	0R 569	69	Randy Pape Beltline Hwy	3.10	12.76	2	North Eugene
No Change	US 20	33	Corvallis-Newport Hwy	54.03	56.15	2	US 20/OR 34, Corvallis
No Change	OR 34	210	Corvallis-Lebanon Hwy	0.34	10.14	2	Linn County
No Change	US 20	33	Corvallis-Newport, Corvallis Bypass Section	55.67	56.80	2	Linn County
No Change	OR 18	39	Salmon River	18.78	52.65	2	Polk and Yamhill Counties, McMinnville, Dayton
No Change	OR 22	30	Wallamina-Salem	12.72	26.14	2	Salem, Polk County
No Change	OR 126	15	Eugene-Springfield Hwy	3.49	9.97	2	Springfield
No Change	OR 22	72	Salem Hwy	0.00	3.16	2	Salem Parkway in north Salem
Remove Portion	OR 42	35	Coos Bay-Roseburg	12.76	20.53	3	Remove portion of OR 42 expressway designation between Dillard Rd - Coquille to Ash St - Myrtle Point. Remove all.
Add	OR 42	35	Coos Bay-Roseburg	9.97	10.85	3	Adds portion that extends the Coos Bay-Roseburg Expressway from W. Central Avenue to the OR 42S intersection.
Remove Portion	OR 62	22	Crater Lake Hwy	6.00	9.20	3	Remove portion of the OR 62 expressway classification in Jackson Co. from OR 140 to Nita Way within the White City Urban Incorporated Community (UUC) boundaries.
No Change	OR 62	22	Crater Lake Hwy	9.20	10.06	3	Retain portion of OR 62 designation within City of Eagle Point UGB.
No Change	OR 62	22	Crater Lake Hwy	1.59	6.00	3	OR 62 from Delta Waters Rd to OR 140
No Change	OR 42	35	Coos Bay-Roseburg	73.88	77.17	3	Lookingglass Rd to I-5 Exit 119 in Douglas County
No Change	US 101	9	Oregon Coast Hwy	239.89	244.27	3	1st Street - Bunker Hill to OR 42 -Coos County
No Change	US 199	9	Redwood Hwy	Y -0.69	6.92	3	I-5 Exit 55 to Applegate Creek Bridge in Josephine County, Grants Pass.
Add	US 97	4	Redmond Reroute	119.02	121.98	4	The newly constructed US 97 bypass of downtown Redmond.
Remove	US 26	53	Warm Springs	106.56	114.73	4	From Reg 1/Reg 4 Boundary, Wapinitia Pass at Mt. Hood, to Ben Road (Private Rd) in Jefferson County & Warm Springs. Remove all.
Remove	US 26	53	Warm Springs	62.16	102.79	4	Warm Springs to NW Dogwood Lane north of Madras. Remove all.
Add	US 97	4	US97 Terrebonne (North)	115.25	115.61	4	Lower Bridge Way to Central Avenue
Add	US 97	4	US97 Terrebonne (South)	115.88	115.94	4	A Avenue to 11th Street
Remove	OR 126	15	McKenzie	109.65	110.65	4	Helmholtz Way/Redmond UGB to SW 27th Street. Remove all.
Remove	OR 126	41	Ochoco	1.37	2.32	4	Veteran's Way to Redmond UGB. Remove all.
Remove	US 20	7	Central Oregon	1.11	4.79	4	NE 11th St to Powell Butte Hwy in Bend and Deschutes County. Remove all.
Remove	US 20	16	Santiam	90.85	99.95	4	Camp Sherman Rd to Barclay Dr in Sisters
Remove	OR 126	15	McKenzie	93.07	93.38	4	US 20-OR 126 Jct to Sisters UGB (portion inside UGB) at Creekside Dr. Remove all.

Data gathered from Region Planners
If approved, changes will be made in the TransInfo database.
ODOT Transportation Data (RICS) 503-986-4157
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OHP Expressway Review
Final Draft Changes

Action	Route No.	Hwy No.	Highway Name	Begin MP	End MP	ODOT Region	General Description/Notes
Remove	US 20	17	McKenzie-Bend	0.00	0.37	4	US 20-OR 126 Jct to Sisters UGB (portion inside UGB). Remove all.
Remove	OR 58	18	Willamette	64.34	86.45	4	ODOT Maintenance Station to US 97 in Klamath Co. Remove all.
No Change	US 97	4	The Dalles-Calif. Hwy	89.65	91.00	4	Cherry Ln to Madras UGB.
No Change	US 97	4	The Dalles-Calif. Hwy	97.29	115.25	4	Madras UGB to Lower Bridge Way in Terrebonne.
No Change	US 97	4	The Dalles-Calif. Hwy	115.94	119.02	4	11th St Terrebonne to Redmond UGB.
No Change	US 97	4	The Dalles-Calif. Hwy	123.60	167.50	4	Yew Ave Redmond to 1St La Pine.
No Change	US 97	4	The Dalles-Calif. Hwy	168.04	185.12	4	Finley Butte Rd Lapine to Potter St in Crescent.
No Change	US 97	4	The Dalles-Calif. Hwy	185.77	202.79	4	S. Crescent to N Chemult.
No Change	US 97	4	The Dalles-Calif. Hwy	203.57	291.73	4	Chemult to California.
No Change	OR 126	15	McKenzie Highway	93.38	109.65	4	Creekside Ct, Sisters to Helmholtz Way, Redmond.
No Change	US 20	17	McKenzie Bend Hwy	0.37	18.51	4	Sisters UGB to US 97 Bend.
No Change	OR 126	41	Ochoco Highway	2.32	17.92	4	Redmond UGB near Sherman Rd to Crooked River, Prineville.
No Change	OR140	424	Southside Expressway	0.00	5.97	4	US 97 to OR 39
No Change	OR 201	455	Olds Ferry-Ontario Hwy	25.17	31.81	5	US 20/26 at Cairo Ln to N Ontario interchange with I-84.

Data gathered from Region Planners
If approved, changes will be made in the TransInfo database.
ODOT Transportation Data (RICS) 503-986-4157
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Metro | *Memo*

Date: February 22, 2013

To: TPAC members and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Climate Smart Communities Scenarios Project: Project Update

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BACKGROUND

Working together with city, county, state, business and community leaders, Metro is researching how land use and transportation policies and investments can be leveraged to help us create great communities, support the region's economy and meet goals for reducing greenhouse gas emissions. In 2013, Metro and local partners will test three scenarios that represent what the region could look like in 2035, if various transportation and land use strategies are pursued, and what it could mean for how we live, how we work and how we get around. The land use visions of cities and counties across the region are the foundation for the scenarios to be tested, with a goal of creating a diverse yet shared vision of how we can keep this region a great place for years to come – for everyone – and meet state greenhouse gas emissions goals.

2012 PROJECT ACCOMPLISHMENTS

The Climate Smart Communities Scenarios Project made significant progress in 2012:

- **Engaged local governments and other stakeholders to share project information and early findings.** From January to September 2012, Metro councilors and staff shared the Phase 1 findings and other project information through briefings to city councils, county boards, county-level coordinating committees, state commissions, Metro advisory committees, regional and state conferences and other meetings. Staff also regularly convened a local government staff technical working group in 2012. The work group provided technical advice to Metro staff, and assistance with engaging local government officials and senior staff.
- **Convened workshops with community leaders on the public health, equity/environmental justice, and environmental outcomes that are most important to consider in the scenario evaluation process.** Reports documenting the Environmental and Equity/Environmental Justice workshops can be downloaded from the project website – www.oregonmetro.gov/climatescenarios. The public health report will be made available in the next month.
- **Partnered with business associations to host a series of focus groups to understand their challenges, opportunities and priorities.** The first two focus groups were held in December in partnership with the Columbia Corridor Association and East Metro Economic Alliance. The remaining four focus groups will include business owners from Clackamas and Washington counties, small business owners in partnership with the Portland Business Alliance, and developers. A summary report will be prepared upon completion of the focus groups in April.
- **Developed a community investment choices frame to guide development of three alternative scenarios to be tested in Summer 2013.** The project's technical work group continues to serve an important advisory role to staff and helped develop the framework. The framework will be brought forward for discussion by MPAC and JPACT at their upcoming meetings.

- **Researched eight case studies to spotlight local success stories and the innovative strategies they have implemented to achieve their local visions and that will also help reduce greenhouse gas emissions.** Staff expects to complete the case studies in April in consultation with local planning staff.
- **Convened workshops with local staff to affirm visions for future community development using Envision Tomorrow to make sure the latest information on local land use goals is incorporated into the project.** Southwest Corridor project staff used Envision Tomorrow to develop the draft land use vision for the corridor last fall. All of these assumptions will be used as land use inputs in the scenarios we test this summer.

Several of these activities have been extended into early 2013 given the time it has taken to effectively engage local communities in work sessions, business leaders in focus groups and complete other activities.

MOVING FORWARD TOWARD PHASE 3

All the work in the Planning and Development Department (e.g., East Metro Connections Plan, Southwest Corridor Plan, Regional Active Transportation Plan, Industrial Lands Readiness effort, TOD program) is focused on implementing the Region 2040 Growth Concept. The Climate Smart Communities project has the same focus: implementation.

Phase 2 of the Climate Smart Communities project is focused on further shaping future choices for the region to advance implementation of community visions and meet the region's greenhouse gas emissions reduction target. By helping communities implement their local visions and plans for main streets, downtowns and employment areas, citizens and businesses will experience all the benefits of increased transportation and housing choice, jobs, equity, cleaner air and water, and access to nature along with the added benefit of a reduction in greenhouse gas emissions.

To stimulate thinking about our choices for the future and the possibilities they present, three scenarios will be tested in 2013. Key findings from Phase 1 and subsequent work that has been completed during Phase 2 will inform to development and evaluation of the three scenarios. Staff direction on three scenarios to test will be provided in May 2013 as part of the regional summit. With regional support, staff will move forward with an evaluation of the three alternative scenarios using the agreed upon key outcomes to measure – e.g., economic, fiscal, equity, community and environmental outcomes.

The three alternative scenarios to be evaluated will be conceptual in nature, and are not intended to represent a preferred scenario. Phase 3 of the process will focus on development and evaluation of a preferred scenario – drawing elements from each of the three scenarios tested in Phase 2.

The results of evaluation will be released in Fall 2013 for discussion and input to identify which policies, investments and actions should be included in a preferred scenario by March 2014. A final preferred scenario is required to be selected by the end of 2014. The final scenario will be implemented through policies, investments and actions at the regional level, including the Regional Framework Plan and Regional Transportation Plan, and, ultimately local plans.

UPCOMING ACTIVITIES AND MILESTONES

FEBRUARY – APRIL 2013 (SHAPE CHOICES)

- Metro advisory committee briefings on investment choices and outcomes to evaluate.
- **Newsfeeds** on strategies under consideration are underway. The series is posted on the project web site.
- Complete **Business focus groups** in February and March in partnership with the Clackamas County Business Alliance, Westside Economic Alliance, and the Portland Business Alliance.
- Conduct **Opt In on-line survey** in late-March to gather input on investment priorities and priority outcomes to be evaluated, and build understanding of the project and strategies under consideration

MAY 2013

Regional summit to share and discuss case studies, survey results, and build support for 3 scenarios to be tested and the priority outcomes to be evaluated through interactive discussions. Summit participants include Metro Council, JPACT, MPAC, elected officials, and business and community leaders that have been previously engaged in the project.

JUNE - SEPTEMBER 2013 (EVALUATE CHOICES)

Staff evaluates scenarios, scopes feasibility and implementation of strategies and works with the Chief Operating Officer and Metro Council to prepare materials to elicit regional and community discussion on results.

OCTOBER 2013 – MARCH 2014 (SHAPE PREFERRED SCENARIO)

Report back to communities, decision-makers and regional partners on the results and decide which elements should be included in a preferred scenario.

MARCH 2014 – DECEMBER 2014 (SELECT PREFERRED SCENARIO)

Evaluate and finalize preferred scenario and related conversations about what is needed to implement it – with final adoption in December 2014 after 45-day public comment period.

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

TPAC/MTAC Work Group Members

February 5, 2013

	Name	Affiliation	Membership
1.	Tom Armstrong	City of Portland	MTAC alternate
2.	Andy Back	Washington County	TPAC alternate & MTAC alternate
3.	Chuck Beasley	Multnomah County	MTAC member
4.	Lynda David	Regional Transportation Council	TPAC member
5.	Jennifer Donnelly	DLCD	MTAC member
6.	Denny Egner	City of Lake Oswego	MTAC member
7.	Karen Buehrig	Clackamas County	TPAC member
8.	Steve Butler	City of Milwaukie	Local government staff
9.	Jon Holan	City of Forest Grove	MTAC alternate
10.	Katherine Kelly/ Jonathan Harker	City of Gresham	TPAC member/MTAC member
11.	Nancy Kraushaar	City of Wilsonville	TPAC member
12.	Alan Lehto/ Eric Hesse	TriMet	TPAC/MTAC member TPAC/MTAC alternates
13.	Mary Kyle McCurdy	MTAC citizen/community group	MTAC member
14.	Ben Bryant	City of Tualatin	Local government staff
15.	Tyler Ryerson	City of Beaverton	MTAC alternate
16.	Margaret Middleton	City of Beaverton	TPAC member
17.	Lainie Smith	ODOT	TPAC alternate and MTAC member
18.	Dan Rutzick/ Peter Brandom	City of Hillsboro	Local government staff
19.	Mara Gross	Coalition for a Livable Future	Community member

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT **FEBRUARY 15, 2013**

FREQUENTLY ASKED QUESTIONS

What is the Climate Smart Communities Scenarios Project all about?
Working together with city, county, state, business and community leaders, Metro is researching the most effective combinations of land use and transportation policies and strategies to help us create great communities and meet Oregon's targets for reducing greenhouse gas emissions. Adopted in 2009, House Bill 2001 requires the Portland metropolitan region to develop a land use and transportation plan that will reduce greenhouse gas emissions from cars and light duty trucks (excluding freight vehicles) to help meet state goals for a healthy environment.

Policies that for years have protected farm and forestland and preserved air quality have also reduced how much we drive, resulting in lower emissions compared with other regions. Through December 2014, Metro and local partners will study scenarios that represent what the area could look like in 2035 if various transportation and land use strategies are pursued. In the largest sense, the project is as much about where we invest to keep this region a great place to live, work and prosper as it is about reducing greenhouse gas emissions.

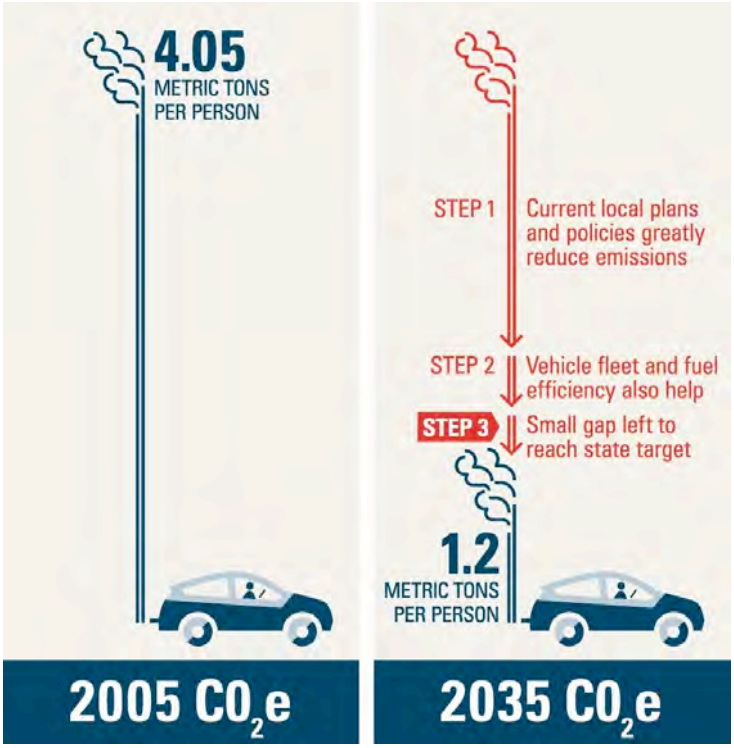
Why is this important?
Many of the policies and actions that can reduce greenhouse gas emissions – planning and building walkable, transit-friendly communities, facilitating advances in technology (cleaner fuels and more fuel-efficient vehicle and engine designs), and making investments in infrastructure and public awareness programs – will not only reduce harmful emissions, they will create great local communities, support good jobs and a resilient regional economy and help the region meet state greenhouse gas emissions reduction targets.

Why should I care about greenhouse gas emissions?
Greenhouse gas (GHG) emissions reductions are part of the state's plan to protect public health, lower energy consumption and reduce the need for driving. Carbon emissions affect the air we breathe and the state has initiated a number of actions to respond to this public health challenge. In 2007, the Oregon Legislature adopted House Bill 3543, setting statewide greenhouse gas reduction goals that apply to all sectors — energy production, buildings, solid waste and transportation.

The first state laws to implement carbon emissions reduction goals focused on the transportation sector, which accounts for approximately 25 percent of the overall emissions in Oregon. Adopted in 2009, House Bill 2001 requires the Portland metropolitan region to develop and adopt a land use and transportation plan that will reduce greenhouse gas emissions from cars and light duty trucks (excluding freight vehicles) to meet these goals.

How much do we have to reduce emissions, and by when?
HB 2001 directs Metro to develop combined land use and transportation plans, called scenarios, that show what policies and investments are needed to accommodate growth while reducing emissions. The

law requires the region to adopt a preferred scenario after public review and consultation with local governments, and local governments are required to implement the scenario through their plans. In 2011, the state land use agency - the Land Conservation and Development Commission - adopted greenhouse gas emissions reduction targets for the year 2035 for each of Oregon's six metropolitan areas. The target for the Portland metropolitan region calls for cutting roadway tailpipe emissions to 1.2 metric tons per person by 2035.



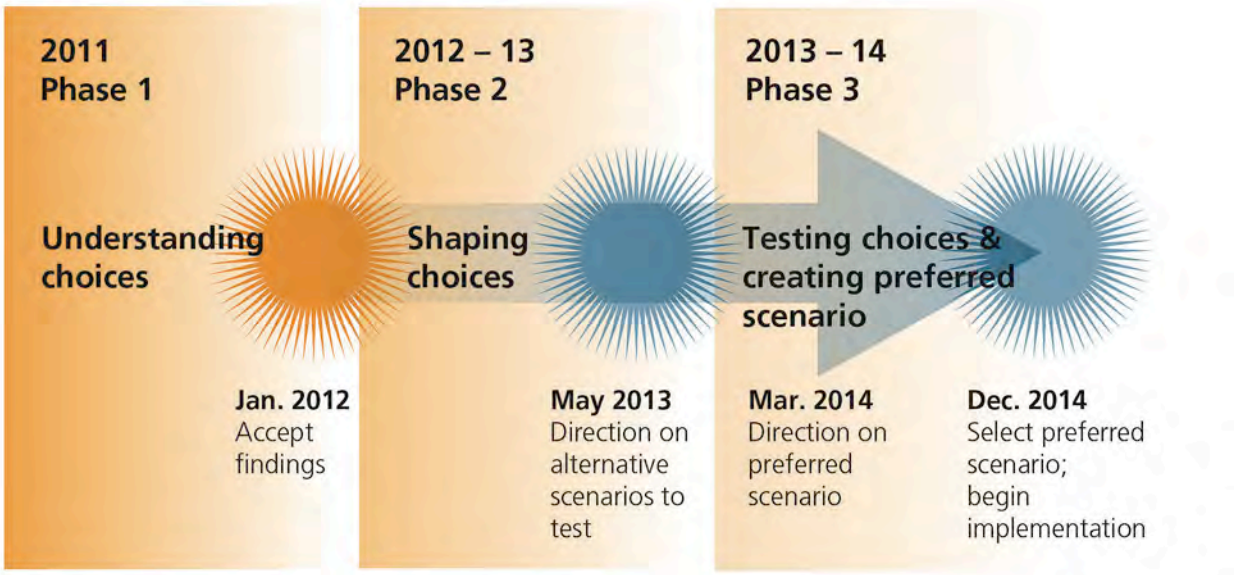
The good news is that implementing current local plans and realizing advancements in cleaner fuels and more efficient vehicles (Steps 1 and 2) are expected to reduce emissions to 1.3 metric tons per person by 2035. Metro and local communities will need to continue working together to make those current plans a reality, and additional investment and policy action will be needed to meet the region's target. In November 2012, the Land Conservation and Development Commission adopted additional rules that provide more details as the region selects a scenario to meet the state target by December 31, 2014.

The Climate Smart Communities Scenarios Project will demonstrate to Oregonians and the nation that carbon reduction targets set by the state can be achieved while producing outcomes of equal importance to residents: clean air and water, vibrant communities, transportation choices, equity, and economic prosperity.

Why is it a *regional* target as opposed to a target for every city and town in the region?
Vehicle travel in the region includes a combination of local travel (trips that begin and end within the region) plus trips that pass through the region, or that begin or end outside the region. In addition, residents of one community often work, shop or go to school in another city or county. That's why the Land Conservation and Development Commission, the state agency responsible for setting the Portland area's carbon reduction target, set the goal at a regional level rather than community by community.

Does that mean that Metro is going to create one solution for the whole region?
There is no single solution to meet the state's greenhouse gas reduction goals. Communities will each have a role to play and a way to reduce emissions their own way. Different policies, actions, investments and technology improvements will combine to form a solution that will be implemented at state, regional and local levels. Local solutions will vary community by community.

Where are we in the project?
The project has three phases. Phase 1 focused on understanding choices. In this phase, all policy options that help reach the targets were open for consideration.



In Phase 2 the climate scenarios project team integrates community input from local government officials, community and business leaders, and the Metro Council to define the alternatives and strategies to be further evaluated. All will be tested in 2013, so cities, counties and community partners can decide which elements of the three should go forward into one scenario for the region to adopt in 2014.

Phase 3 is about building the strategy and defining how best to implement it. Metro, in partnership with local community and business leaders, will develop and recommend the preferred land use and transportation scenario and strategies needed to support implementation. In 2014, the region must adopt a scenario that supports local goals but also meets the emissions reduction target adopted for the region.

What do you mean by policies and strategies?
During Phase 1 analysis the team evaluated six categories of policies that could be evaluated using a new modeling tool called GreenSTEP, as seen below:

With as many as five different strategies in each of six categories, and including up to three levels of ambition in each category, the team analyzed 144 different combinations, called scenarios.

What is GreenSTEP?
GreenSTEP is an innovative modeling tool that supports scenario planning at the state and metropolitan area levels. It was developed at the request of the Oregon Global Warming Commission. Standard urban travel models are concerned only with forecasting traffic volumes on specific roadways in urban areas. GreenSTEP models account for household vehicle travel, energy consumption and greenhouse gas emissions regardless of where the travel occurs. But GreenSTEP can also calculate household vehicle travel, household walk and bicycle trips, amounts of money households spend on vehicle travel, and more.

Because it is a new type of model, GreenSTEP has been and continues to be peer-reviewed by state, national and international modeling experts. It is recognized by the U.S. Department of Transportation and by the American Association of State Highway and Transportation Officials.

ODOT and Metro worked together to develop a metropolitan area version of GreenSTEP used to support Phase 1 of the climate scenarios project. This version allows planners to evaluate prospective policies at a much finer level of geographic detail than is possible with the state level version.

What has been learned so far?
The Phase 1 findings are summarized below:

1. Current local and regional plans and policies are ambitious and provide a strong foundation for meeting the region's greenhouse gas target.

2. The reduction target is achievable but will take additional effort and new strategic actions.

3. Most of the strategies under consideration are already being implemented to varying degrees in the region to achieve the 2040 Growth Concept vision and other important economic, social and environmental goals.

4. A range of policy choices exists to reduce greenhouse gas emissions; the best approach is a mix of strategies.

5. Community design and pricing play a key role in how much and how far people drive each day and provide significant greenhouse gas emissions reductions.

6. Fleet, technology and pricing strategies provide similar significant greenhouse gas emissions reductions but no single strategy is enough to meet the region's target.

7. Road management and marketing strategies improve system and vehicle efficiency and reduce vehicle travel to provide similar, but modest greenhouse gas emissions reductions.

You can download a pdf of the complete Phase 1 Findings Report at
http://www.oregonmetro.gov/climatescenarios

How will social equity and environmental justice be considered and achieved? Will Metro make sure that the region's most vulnerable populations – low-income households, communities of color, older adults and children, people with disabilities and households with limited English proficiency - benefit from the climate scenarios project?
We all want a region that provides good jobs, safe and reliable transportation, livable neighborhoods, and access to the opportunities that create the quality of life for which our region is known – for everyone. As part of the project, Metro is creating a "scorecard" to measure how well the chosen scenarios work to advance environmental justice and equity along with other desired outcomes. The scorecard will include a set of environmental justice and equity outcomes that the region desires, along with ways to measure each outcome. A variety of evaluation measures will be used to assess the scenario options, including housing and transportation costs, access to jobs and affordable housing and transportation choices, air quality, implementation costs, vehicle miles traveled, freight costs, and so on. Housing and transportation costs in particular will help determine the effect of certain policy actions on vulnerable communities.

Phase 2 outreach includes discussions with organizations working to advance equity and environmental justice in the region to provide guidance to this aspect of the process. Project outreach will also include

opportunities for community leaders to help identify what strategies should be included in the preferred scenario and how best to implement the strategies being considered to ensure the preferred scenario advances equity and environmental justice in the region.

What about the business community? How will business and economic interests be considered? Will Metro make sure that the region's preferred approach creates jobs and supports the area's economic competitiveness?

The community engagement strategy described for equity and environmental justice will also involve business leaders and business associations. Project outreach will include meetings with representatives from business sectors such as freight and building industries, shippers, ports, commercial and residential developers, small business owners, as well as the region's largest employers and business associations. Project outreach will also include opportunities for business leaders to help identify what strategies should be included in the preferred scenario and how best to implement the strategies being considered to ensure the preferred scenario advances job creation and economic prosperity in the region.

How much is all this going to cost and who's going to pay for it?

Cost will be one of many evaluation criteria used to guide the region's final selection and adoption of a preferred scenario in 2014. It will be a critical dimension in any discussion of implementation.

Phase 1 was intended to study a range of options to meet the target. With a variety of options still under consideration, it is not possible to estimate costs until a more specific direction is agreed upon.

Evaluation of costs as well as potential cost savings will occur in Phase 3. After Phase 3, the preferred scenario will be implemented through policies, actions and investments at the state, regional and local levels. An important outcome of the project will be documenting the investments and policies necessary to achieve local plans and visions, working together to realize those visions and finding ways to leverage or seek additional state and regional investment.

As the scenarios planning continues to be refined, policies and actions already being implemented as part of a community's planning process will likely become important building blocks in the final scenario's recommendation. The project is as much about investing in smart growth, healthy communities and a wonderful place to live and work as it is about reducing carbon emissions.

How can I stay involved?

There are many ways to stay involved in the development of the preferred scenario. Sign up to receive updates via e-mail about additional public events, forums, and web surveys at the project website at www.oregonmetro.gov/climatescenarios or by calling 503.797.1551.

TIMELINE FOR ENGAGING CITIES, COUNTIES AND COMMUNITIES

Description	Participants	Time frame
Technical work group – Meets regularly to review and provide input on analysis	City, county, TriMet, state and Metro planning staff, and community representatives	Ongoing throughout project (2011-2014)
Accept Phase 1 Findings Report	Metro Policy Advisory Committee, Joint Policy Advisory Committee on Transportation, Metro Council	January 2012
Discuss findings with local leaders – Presentations at city councils and county boards	Metro councilors and staff, and city and county elected officials	Jan.-Sept. 2012
Envision Tomorrow introductory training – Learn how to use scenario planning software for regional and local applications	Planning staff from Beaverton, Gresham, Hillsboro, Oregon City, Portland, West Linn, Clackamas County, Washington County, Metro and TriMet	June 2012
Scorecard workshops and focus groups – Identify evaluation criteria and outcomes to measure in scenario analysis	Leaders representing the public health, equity and environmental justice, environmental and business communities	Spring-Fall 2012 and Winter 2013

Continued on reverse …

Description	Participants	Time frame
 **Case studies –** Examples to showcase communtiy visions and the strategies implemented to achieve them	Beaverton, Clackamas County Gresham, Hillsboro Portland and Wilsonville	2012-2013
 **Community partner work sessions** – Use Envision Tomorrow software to assess and affirm community visions for future development; results will inform scenarios options	Planning staff from communities around the region	Nov. 2012-Jan. 2013
 **Southwest Corridor land use vision work sessions** – Use Envision Tomorrow software to assess and affirm community visions for future development; results will inform Southwest Corridor and scenarios projects	Elected officials and planning staff from SW Corridor partners	Fall 2012
 **Online engagement** – Opt In survey tool for input on strategies being considered and how they will be evaluated	General public	March 2013
 **Summit** – Community leaders showcase local actions that are already reducing emissions and provide input on the three scenarios to test in 2013	JPACT, MPAC, Metro Council, other elected officials and community leaders	Spring 2013
 **Community partner workshops and online engagement** – Scope implementation, discuss findings, benefits and tradeoffs of choices, develop preferred scenario	Public, elected officials and community leaders	Summer-Fall 2013 and Winter 2014
 **MPAC, JPACT, Metro Council** – Direct staff 2011, accept findings January 2012, agree on three scenarios to test in May 2013, select a preferred scenario in Dec. 2014	MPAC, JPACT, Metro Council	2011-2014

STAY INFORMED

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For email updates, send a message to
climatescenarios@oregonmetro.gov

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Metro | *Research Center*

Date: Thursday, February 21, 2013

To: TPAC

From: Mike Hoglund, Research Center Director

Subject: Metro Area 2011 Household Survey

Metro's Research Center staff will provide an update on the region's Household Travel Behavior Survey that was conducted in 2011. The purpose of the survey was to update and enhance the region's travel forecasting model. However, the survey provides insight into a number of aspects of regional travel and staff will share those insights. Please feel free to offer your insights as well.

Background

The Oregon Household Activity Survey (OHAS) is the first in-depth study of local travel behavior in the last 15 years. This multi-agency cooperative survey gathered detailed information about families, persons, vehicles, and daily trip-making from about 19,000 randomly-selected households throughout Oregon and Southwest Washington. Surveys of this type are essential for developing and maintaining travel forecasting models.

Metro's OHAS piece gathered data from 4800 households in Multnomah, Washington, and Clackamas counties during the spring and fall of 2011. These periods were chosen to represent "typical" travel conditions, with schools in session, and excluded weekends and holidays. Each household was assigned a travel day, where each person was asked to record every place visited over a 24-hour period, arrival and departure times, purpose of the visit, who they traveled with, and how they got there. Parking locations, transit routes and boarding locations, parking costs, and other trip details were included. Those data have been combined with OHAS data gathered from 1650 Clark County households in fall, 2009 to provide a complete dataset for regional model development.

Survey Use

The Research Center has used the 2011 OHAS data for several updates and enhancements to the travel forecasting model, including recalibrated mode choice and time-of-day components, and improved representation of walk and bike trips. Staff are currently using OHAS data to estimate elements of a new tour-based model, and will continue to use the data for other planned model improvements.

The survey also provides a "snapshot" of current travel behavior in the region. The Research Center has done data tabulations and comparisons to similar data gathered in our last (1994) survey that reveals some interesting findings and trends. We will continue to explore the data, with particular emphasis on correlations between environment (land use, infrastructure and amenities, etc) and travel behavior.

The March 1st presentation will feature findings and trends from the OHAS data, results of a very preliminary exploration of environment and travel behavior. Then, depending upon the Committee's interests, we can delve further into the survey's methodology and data components, or respond to other questions.

A link to some of the statistics that will be highlighted is here:
http://library.oregonmetro.gov/files//research_center_ohas_2011_summary.pdf

Oregon
John A. Kitzhaber, MD., Governor

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I-5 Operational Project Analysis
February 22, 2013

This document was prepared in response to three questions posed by Metro staff following their decision not to process ODOT's RTP amendment request for two operational projects.

1) *Question*
Do the following two projects proposed by ODOT to improve the safety and operation of I-5 induce latent traffic demand to the freeway?

- I-5 NB at Lower Boones-Ferry Exit-Ramp – convert the exiting ramp from a one-lane/lane drop to a two-lane exit-ramp where the rightmost lane is an exit only lane and the adjacent lane is a choice lane (diverge or remain on I-5NB).

- I-5 SB from Lower Boones Ferry to Nyberg – extend I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp.

Findings
An assignment run was made with these projects coded into the 2010 travel demand model and the results were then compared with the 2010 base no-build model. The resulting trip differences for the PM peak 1-hour show:

I-5 NB
- 22 additional trips were able to exit at Lower Boones Ferry under the new configuration through improved operations.
- The model showed no induced NB trips entering or exiting the project area. [1]

I-5 SB
- The model showed no induced SB trips entering or exiting the project area. [2]
- However, 96 trips did alter their route choice within the project area. The majority of these trips chose to stay on I-5 SB between Lower Boones Ferry Nyberg rather than exiting at Lower Boones Ferry and taking local roads to their destination, likely as a result of improved Interstate operations.

The 2010 travel demand model has volumes on I-5 mainline in the project influence area ranging from 6,000-7500 per direction during the PM peak hour. The above summary of trip changes shows the shift in traffic is insignificant and that, while there may be latent demand for I-5, the model demonstrates no increase in trips results from these two projects. This model result is consistent with the purpose of the two proposed projects, which is to enhance traffic safety and

[1] The model showed insignificant trip differences between Build and No-build.
[2] The model showed insignificant trip differences between Build and No-build.

traffic operations at freeway entrance and exit ramp junctions which are experiencing safety and operational issues today. These projects are not intended to, and do not, "add capacity" for mainline through traffic.

2) *Question*
Can the proposed project safely accommodate the heavy entrance-ramp volume from the Lower Boones Ferry entrance ramp to I-5 SB as a merge?

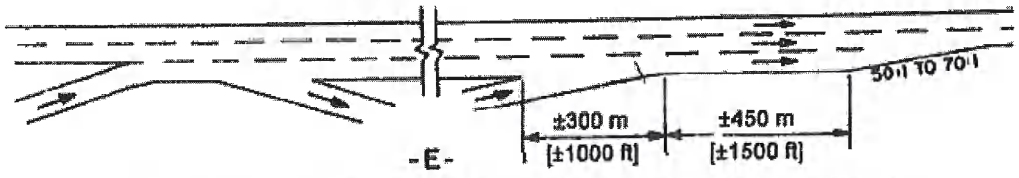
Findings
Based on our experience, and the proven results of recent projects with similar merging entrance-ramp volumes in Region 1, accommodating these volumes will not be a problem. Ramp metering is already in place at this entrance ramp and will continue following project implementation.

3) *Question*
Can auxiliary lanes carry through multiple interchanges?

Findings
According to AASHTO's *A Policy on Geometric Design of Highways and Streets*:

> An auxiliary lane is defined as the portion of the roadway adjoining the traveled way for speed change, turning, storage for turning, weaving, truck climbing, and other purposes supplementary to through-traffic movement.[3]

The accompanying figure below shows that an auxiliary lane can be carried through one or more interchanges:



AUXILIARY LANE DROPPED BEYOND AN INTERCHANGE

Exhibit 10-51. Alternative Methods of Dropping Auxiliary Lanes

Recent project precedents for these two projects in Region 1:
As part of the last Interstate Maintenance project through this section of highway ODOT restriped the southbound Nyberg off-ramp exactly as is being proposed for the northbound off-ramp to Lower Boones Ferry.

ODOT has built a number of similar extended auxiliary lanes being proposed between Lower Boones Ferry on I-5 and other highways through-out Region 1, including most recently,

[3] AASHTO – A Policy on Geometric Design of Highways and Streets, 2011 6th Edition.

extending an auxiliary lane that entered at Highway 217 and dropped at Carmen Drive to Lower Boones Ferry Road last year.

There are a number of additional examples throughout Region 1, including the following:

- I-5 NB: Lower Boones Ferry entrance-ramp – OR 217 exit-ramp
- OR 217 SB: Sunset Highway EB entrance-ramp – TV Highway exit-ramp
- I-205 SB: I-84 WB entrance-ramp – Glisan Street./Stark Street exit-ramp

Oregon
John A. Kitzhaber, MD, Governor

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John Mermin, Senior Transportation Planner
Metro Planning & Development
600 NE Grand Ave.
Portland, OR 97232-2736

Dear Mr. ~~Mermin~~ John:

ODOT requests amending the Regional Transportation Plan (RTP) to incorporate Corridor Bottleneck Operations Study (CBOS) projects to the 2035 RTP Financially Constrained project list. ODOT Region 1 Major Projects started the CBOS in 2009 to identify, rank and provide conceptual solutions for the worst bottlenecks on I-5 south of the Marquam Bridge, I-205, I-84, I-405 and US 26 in the Portland Metro Region. Several projects have been moved into design and construction, and preliminary results are very encouraging.

The CBOS has identified several bottlenecks on the aforementioned corridors based on PORTAL data, ODOT traffic cameras, travel time runs, collision data and field observations. These data helped identify the location of the bottleneck, the duration of the congestion, contributing factors and speeds during bottleneck activation periods. Some bottlenecks locations were eliminated from further investigation because a project has been programmed to address the problem, or a cost-effective improvement was not feasible. The bottlenecks were ranked in terms of delay and cost, and those projects with the highest delay and lowest costs were proposed to move forward.

Four (4) high-priority projects proposed to address bottlenecks on major commute/freight routes in the Portland metro area are described in more detail on the following pages. One of these projects (I-5 NB at Lower Boones Ferry Rd, Figure 1) does not require an RTP amendment, as it only involves restriping.

These projects were selected as providing the best value of benefits and cost. It should be noted, however, that traffic volumes on these highways are very high, particularly during the peak commute hours, and as these operational improvements do *not* add capacity, the benefits achieved will not eliminate congestion, but rather improve the operations and safety of the mainline. Notwithstanding these occurrences, the proposed projects will reduce congestion at identified bottlenecks, particularly on the peak commute shoulders, and enhance safety by improving the weaves and merges that occur at interchanges. Follow-up phases are identified that would provide further benefits, funding permitting.

Briefly, the three high priority projects are summarized as:

I-5 SB: Lower Boones Ferry to Nyberg, Figure 2

- ***Problem:*** The auxiliary lane from Hwy 217 entrance-ramp drops at Lower Boones Ferry Road exit-ramp, and a high volume weaving occurs to Nyberg St. exit-ramp, resulting in poor lane utilization, collisions and operational problems. Solution: Extend I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones

Ferry entrance-ramp. The auxiliary lane will provide room for mainline traffic to merge with entering and exiting traffic for safer and more efficient operation in the three I-5 SB through lanes.

- ***Solution:*** Extend I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp. Auxiliary lane would provide a continuous lane from Hwy 217 to Nyberg Street exit-ramp.
- ***Project Benefits:*** Reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow. Extension of the auxiliary lane would provide continuous lane from Hwy 217 to Nyberg St. exit. Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on similar comparative auxiliary lane improvements.
- ***Estimated Cost:*** $7M - $8.5M

I-205 NB: Powell/Division to Stark/Washington, Figure 3

- ***Problem:*** The combined volumes from the two consecutive entrance ramps are high, coupled with the high mainline volumes. Conflicts between entrance-ramps create turbulence at merge points with mainline and difficult weaving movements. Heavy exit demand at Stark/ Washington St. creates unsafe weaves to existing single-in exit ramp.
- ***Solution:*** Extend existing accel-lane from Powell Blvd. entrance-ramp to match with existing auxiliary lane from Division St. entrance-ramp to Stark/Washington St. exit-ramp, and provide two-lane exit at Stark/Washington. Auxiliary lane would provide an extended distance for traffic to merge onto mainline. Two-lane exit at Stark/Washington St. will reduce weaving conflicts in this segment.
- ***Project Benefits:*** Reduce congestion and enhance stable traffic flow. Construction of a 2-lane exit ramp at Stark/Washington will allow motorists additional time/distance to find gaps and safely weave over lanes. Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on similar comparable auxiliary lane improvements.
- ***Estimated Cost:*** $6.5M to $7.5M

I-205 SB: I-84 EB to Stark/Washington, Figure 4

- ***Problem:*** Division/Powell Blvd. exit-ramp to entrance-ramp from I-84 EB. Congestion/queuing starts from weaving section between Stark/Washington St. entrance-ramp and Hwy 26/Division St./Powell Blvd exit ramp to I-205. Contributing Factors: high volumes from I-84 EB merging with I-205 mainline traffic. Conflicts between entrance-ramps create turbulence at merge points with mainline and difficult weaving movements.
- ***Solution:*** Extend lane from I-84 EB entrance-ramp to Stark/ Washington St., to match existing auxiliary lane from Stark/Washington St. to Division St./Powell Blvd. Approximately 25% of traffic from I-84 EB entrance-ramp is destined for Division/ Powell Blvd. exit. Auxiliary lane would provide direct connection to this exit for almost one out of four vehicles in this segment of I-205.
- ***Project Benefits:*** Reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow. Construction of the auxiliary lane would facilitate the I-84 EB to Division/Powell movements. This auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on similar comparable auxiliary lane improvements.
- ***Estimated Cost:*** $7.0M - $8.5M

The total estimated costs of these projects are $21.5 - $26.5 million. To add these projects to the Financially Constrained list, ODOT is proposing to reduce $26.5 M from the OR 217: Braid from B-H to Allen (#10875) from the Financially Constrained list.

Please don't hesitate to contact me if you have questions or concerns about this request,
Cordially,

Andrew Johnson
Major Projects Manager
ODOT, Region 1

Attachments

cc: Jason Tell, ODOT Region 1 Manager
Rian Windsheimer, ODOT Planning & Development Manager
Tim Wilson, ODOT Senior Planner

ODOT Region 1

Corridor Bottleneck Operations Study (CBOS) Purpose

The Corridor Bottleneck Operational Study (CBOS) purpose is to identify bottlenecks and develop potential project solutions to address the safety and operational problems. CBOS is a new approach to identify and analyze safety-spot improvements. This is part of ODOT's effort to look for operational and low-cost "fixes" at spot-specific location to address safety issues.

FHWA Localized Bottleneck Reduction (LBR) Program

ODOT's CBOS is in response to Federal Highway Administration (FHWA) and SAFETEA-LU work with the Localized Bottleneck Reduction (LBR) Program. The LBR program is targeted at point-specific locations (e.g., ramps, lane squeezes, weave areas, abrupt changes in highway alignments, etc) or small corridors of delay, as opposed to larger "mega-projects" to address systemic congestion. Systemic congestion is often analogous to entire corridors or regional congestion; which is beyond the focus of this program. The LBR Program focuses on recurring bottlenecks; i.e., those that are operationally influenced by design or function, and impacted upon by traffic over-demand.

Recurring Bottlenecks

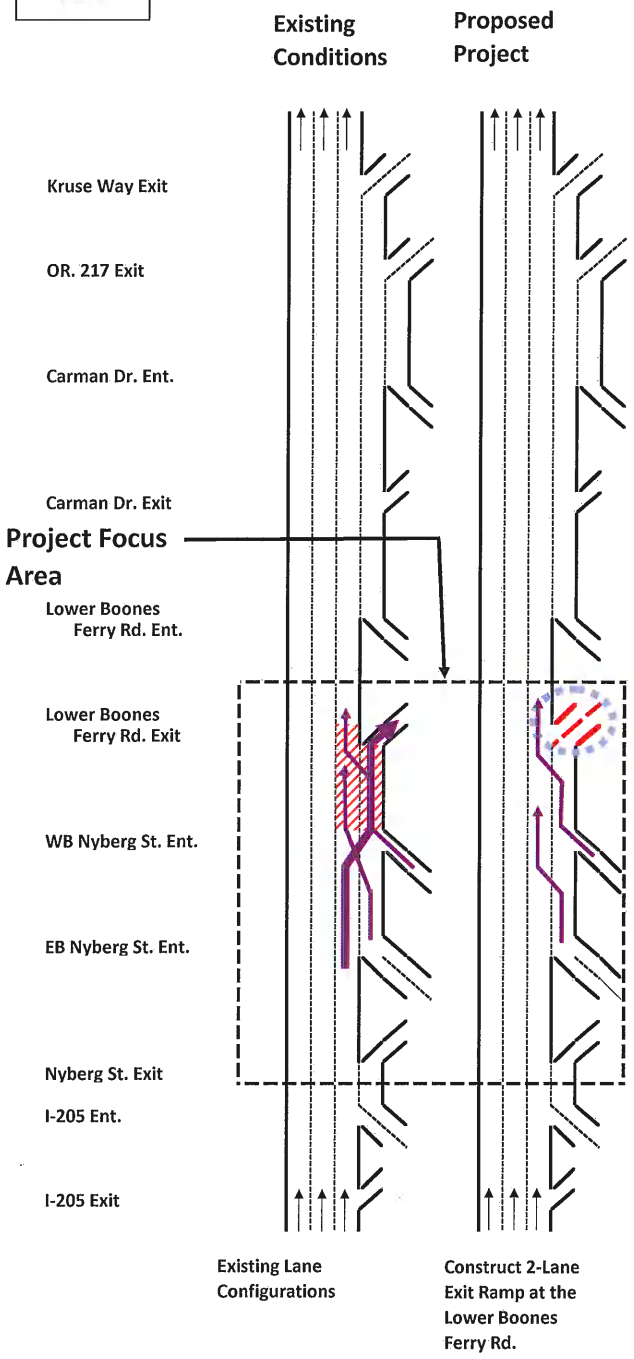
CBOS is not a corridor-level analysis to develop a project to add capacity to the freeway system. Its purpose is to address site-specific recurring bottlenecks to reduce the conflicts (weaving, merging or drop lanes) and allow for a more stable flow of traffic at problematic interchanges. Every one of the bottlenecks identified in CBOS occur at a freeway interchanges as cars enter or leave the mainline. Therefore, improvements are designed to reduce the amount of conflicts with the mainline traffic. The addition of auxiliary lanes will allow for the weaving and merging occurring in a separate lane and not on the mainline. The result is a smoother flow of through traffic on the mainline. Recent ODOT safety analysis has indicated that by adding auxiliary lanes in weave/merge sections of freeways the crash rates will be reduced by nearly 30%.

Safety and Operational Improvements

The CBOS focus is on relieving recurring congestion chokepoints (as opposed to nonrecurring congestion cause) and the operational influences that cause them. Widening, lengthening or restriping these problem areas to unclog them can often be done with lower cost, less intensive "footprint". These safety improvements will not provide long-term capacity relief to congestion problems, but they do improve safety at the time of their construction and over time the bottleneck location will continue to operate safer.

Map ID
B

I-5 Northbound: Lower Boones Ferry Exit-ramp



LEGEND

- Area of Congestion
- 2-Lane Exit-Ramp Improvement
- Critical Movements in Focus Area

Existing Conditions

Queue: The queuing occurs intermittently between the Lower Boones Ferry exit-ramp and the westbound Nyberg St. entrance-ramp. The cause of the queuing is a combination of the high volume of traffic entering from the two Nyberg Street entrance-ramps, the high volume of exiting traffic at Lower Boones Ferry Road and the associated weaving maneuvers that happen between the Nyberg and Lower Boones interchanges. The mainline traffic south of Nyberg currently has to make a lane change to the right in order to exit off to Lower Boones Ferry.

Duration: Based on observation, the duration of the queue at the Lower Boones Ferry Road exit-ramp is approximately 7:15AM to 8:30 AM and 3:00PM to 5:00PM.

Speed: Based on observation, speeds between the Nyberg and Lower Boones Ferry interchanges drop to as slow as stop-and-go conditions in the outside lanes.

Volume (2011): Mainline: 73,070 (10% truck); Exit-Ramp to Lower Boones Ferry Rd: 12,810; Total volumes from combined Nyberg Entrance-Ramps: 21,860.

Project Focus Area Crashes: Rate: 0.45 per MVMT; Frequency: 63 crashes from 2007-2011; 1 fatal crash.

Proposed Project

Description: The proposed project will convert the existing exit-ramp to Lower Boones Ferry Road from a one-lane/diverge to a two-lane exit-ramp where the rightmost lane is an exit only lane and the adjacent lane is a choice lane (diverge or remain on I-5 NB).

Benefits:

Queue: The proposed project helps to alleviate queuing in the outside lanes on I-5 northbound. Mainline traffic south of Nyberg would have the ability to exit to Lower Boones Ferry Road without having to make a lane change, thereby reducing the turbulence near the exit gore area.

Duration: It is anticipated that the queue would be mostly reduced.

Speed: The speeds through the project focus area would increase to 45-50mph.

Project Focus Area Benefits Summary:

Reduce weaving conflicts and congestion, enhance to stable traffic flow and travel time reliability. This would result in safety improvements due to enhanced traffic operations.

Project Estimated Cost:

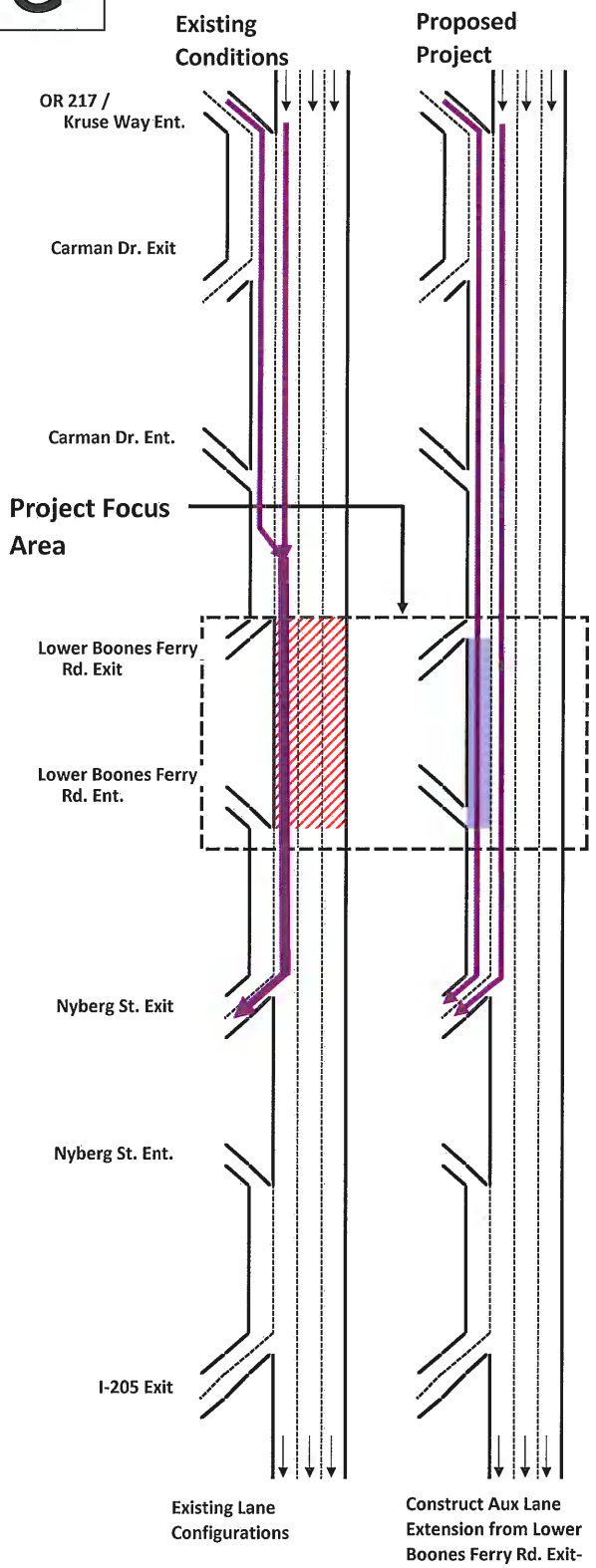
$1.0 M - $2.0 M

Oregon Department of Transportation

Site Map Diagram
C-BOS: High Priority Projects
I-5 Northbound: Lower Boones Ferry Exit-ramp

Map ID
G

I-5 SB: Lower Boones Ferry Exit-ramp to Lower Boones Ferry Entrance-ramp Auxiliary Lane



LEGEND

- Area of Congestion
- Auxiliary Lane Improvement
- Critical Movements in Focus Area

Existing Conditions

Queue: Queuing experienced from the Lower Boones Ferry Road exit-ramp to the Lower Boones Ferry Road entrance-ramp. Contributing Factors: The fourth lane from OR 217 entrance-ramp drops at Lower Boones Ferry Road exit-ramp, and a high volume weaving movement to Nyberg St. exit-ramp, resulting in an unbalanced lane utilization and operational deficiency.

Duration: Approximately 2 hours daily between 4:00PM to 6:00PM.

Speed: Bottleneck activation speeds drop as low as 30 mph.

Volume (2011 ADT): Mainline: 77,020 (10% truck); Exit-Ramp to Lower Boones Ferry Road: 13,610; Entrance-Ramp from Lower Boones Ferry Road : 12,870; Exit-ramp to Nyberg St.: 21,190

Focus Area Crashes: Rate: 0.39 per MVMT; Frequency: 27 crashes from 2007-2011; 1 Fatal Crash

Proposed Project

Description: Extend I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp.

Benefits:

Queue: Congestion/queuing would be reduced in all lanes by providing a balanced roadway section.

Duration: It is anticipated that the queue would be reduced to less than an hour during the peak periods.

Speed: Average speeds within the congested areas are expected to increase to between 40 and 50 mph.

Project Benefits Summary:

Reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow. Extension of the auxiliary lane would provide continuous lane from OR 217 to Nyberg St. exit. Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on comparative auxiliary lane improvements.

Oregon Department of Transportation

Site Map Diagram
C-BOS: High Priority Projects
I-5 SB - Lower Boones Ferry Exit-ramp to Lower Boones Ferry Entrance-ramp

Materials following this page were distributed at the meeting.

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TRANSPORTATION POLICY ALTERNATIVES COMMITTEE

January 25, 2013
Metro Regional Center, Council Chamber

MEMBERS PRESENT	AFFILIATION
Karen Buehrig	Clackamas County
Steve Entenman	Community Representative
Adrian Esteban	Community Representative
Carol Gossett	Community Representative
Nancy Kraushaar	City of Wilsonville Representing Cities of Clackamas Co.
Katherine Kelly	City of Gresham, Representing Cities of Multnomah Co.
Heather McCarey	Community Representative
Margaret Middleton	City of Beaverton, Representing Cities of Washington Co.
Dave Nordberg	Oregon Department of Environmental Quality
Cora Potter	Community Representative
Satvinder Sandhu	Federal Highway Administration
Jeff Swanson	Community Representative

MEMBERS EXCUSED	AFFILIATION
Andy Back	Washington County
Mike Clark	Washington State Department of Transportation
Elissa Gertler, Chair	Metro
Scott King	Port of Portland
Alan Lehto	TriMet
Dean Lookingbill	Southwest Washington Regional Transportation Committee
Karen Schilling	Multnomah County
Paul Smith	City of Portland
Rian Windsheimer	Oregon Department of Transportation

ALTERNATES PRESENT	AFFILIATION
Ken Burgstahler	Washington State Department of Transportation
Clark Berry	Washington County
Kelly Brooks	Oregon Department of Transportation
Lynda David	Southwest Washington Regional Transportation Committee
Coutney Duke	City of Portland
Phil Healy	Port of Portland
Eric Hesse	TriMet
Joanna Valencia	Multnomah County

STAFF: Ted Leybold, Kelsey Newell, Evan Landman, Deena Platman, John Mermin, Brian Monberg, Chris Deffebach, Ramona Perrault, Josh Naramore

1. CALL TO ORDER AND DECLARATION OF A QUORUM

Ms. Chris Deffebach of Metro chaired the meeting in the absence of Chair Elissa Gertler. She called the meeting to order at 9:34 A.M. and declared a quorum.

2. COMMENTS FROM THE CHAIR AND COMMITTEE MEMBERS

Mr. Ted Leybold of Metro updated the group on the upcoming JPACT STIP recommendations. Other than discussion, JPACT has not taken action on the 150% list, but there is still a possibility that JPACT may weigh in as a group during the 100% list.

Mr. John Mermin of Metro provided information on the final list of RTP amendment requests. A full list of these projects is available in the memo included as a supplemental item to the meeting packet. Mr. Mermin walked through the projects and noted that Metro had concerns with one of the three ODOT requests and was working through those issues with them. Preparations for air quality modeling and analysis are underway. Once modeling and analysis is complete, a public comment period will be held from February 22 until April 8. TPAC will be asked for a recommendation at the April 26 meeting. Ms. Kelly Brooks of ODOT described the changes to the 2016-18 STIP criteria. Unlike in previous iterations, there are no hard criteria since they are pulling from so many funding sources. A copy of a letter from Pat Egan to Bill Wyatt that explains the background of the process will be forwarded to TPAC members .

3. CITIZEN COMMUNICATIONS ON NON-AGENDA ITEMS

Mr. Ron Swaren shared photos of double-decker buses used by transit agencies in Everett, Washington and Ottawa, Canada. He suggested that this type of bus could be used as a flexible, lower-cost alternative for mass transit in suburban areas. Mr. Swaren mentioned that he had spoken with the director of the Snohomish County transit agency about coming to Portland to give a talk on double-decker buses.

4. CONSIDERATION OF THE TPAC MINUTES FOR JANUARY 4, 2013

MOTION**:** Ms. Katherine Kelly moved and Mr. Jeff Swanson seconded to approve the minutes for January 4, 2013, with no corrections.

ACTION: With all in favor, motion passed.

5. Proposed Transportation Control Measure Substitution Strategies and Substitution Options – DISCUSSION AND APPROVAL

Mr. Ted Leybold of Metro introduced Mr. Dave Nordberg of the Oregon Department of Environmental Quality (DEQ) to lead the discussion and answer questions on the different options to ensure that the region stays in conformity with EPA carbon monoxide regulations.

In the 1970s and 1980s, the Portland metropolitan region violated EPA air quality standards for carbon monoxide. DEQ led a process to comply with regulations, which included control measures on sectors like transportation, land use and industry. Part of that plan was the creation

of these TCMs. Over two ten-year maintenance plans, the region has had to demonstrate to EPA that it was in compliance with the following TCM requirements:

- Maintain increasing transit service (+1% per year)
- Add 28 miles of bike lands over the lifetime of the regulations
- Built 9 miles of sidewalk more than otherwise required

Due to the recession and resulting financial constraints placed upon TriMet, it is projected that the five-year rolling average of service hours will increase only .8% this year. If this prediction is accurate, the region will enter a state of nonconformity with the transit TCM for which penalties may be imposed. In the worst case, federal transportation funds could be suspended. More likely, the region would have to demonstrate that the TCMs had been given maximum priority through direction of additional funds to TriMet. DEQ has identified three responses to this issue: wait until September to determine whether noncompliance actually happens; reallocate funding within the MTIP and put more money into transit; or, do a substitution process with the three Transportation Control Measures (TCMs).

Mr. Nordberg asked TPAC provide direction or approval to pursue the TCM substitution process.

The memo included in the meeting packet describes four proposed substitutions:

- Combine the three investment-based TCMs into one, where success would be gauged based on having a combination of the three that achieves 417 lbs of carbon monoxide reduction per day. Depending upon how the new TCM was written, it could continue, change or remove the minimum levels of investment in transit, bicycle and pedestrian infrastructure in the current TCMs.
- Change the averaging period from five years to a time frame that brings the region back into conformity.
- Rebalance the individual targets to reflect the region's overachievement in building bike infrastructure, diminishing the amount of transit investment required.
- Other ideas.

Mr. Nordberg encouraged committee members to contact him with ideas or input for the substitution process.

TPAC member discussion included:

- TPAC members discussed whether improved vehicle emissions standards and technology could be applies to the region's air quality conformity measures. Mr. Nordberg explained that the projected tightening of emission requirements is something that could be explored. The current TCMs are calculated to remove 417 lbs of carbon monoxide per day, so other measures could be considered to supplement the three current TCMs so long as the new package of emission reduction achieved that standard of emissions reduction.
- Members questioned whether efforts undertaken as part of public-private partnerships could be incorporated into the TCMs. There is nothing specifically involving PPPs at this point, but any measures that would create these reductions would be considered.
- TPAC members emphasized that this is not an issue that can afford to be put off and the substitution strategy be pursued.

6. Least Cost Planning Tool: Mosaic (Phase 3) – INFORMATION

Mr. Robert Maestre of ODOT and Mr. Sam Seskin of CH2MHill presented on Mosaic, the web-based least cost planning tool developed by ODOT at the direction of the legislature. Least cost planning is an approach which seeks to find the most cost-effective solutions to problems by assessing the alternatives early.

Mosaic allows users to evaluate and compare the impacts of various decisions made at the planning level. It cannot be used at the project level, though it could be modified for large-scale project use in the future. Results are delivered both as a benefit-cost analysis and as a set of numbers related to other indicators defined by stakeholders. Mr. Maestre suggested that Mosaic could be very useful in conducting benefit-cost analyses for TIGER grants.

Mosaic is a web-based tool, and the majority of what people need to use the tool is available online. Much of the benefit-cost analysis elements of Mosaic are drawn from travel demand modeling, but to use the tool, information from other models, collected data, and public involvement and feedback are important to set parameters for evaluating different policy options. Users can bundle actions together: for example, a package of strategies focused on regional freight could be directly compared to a bundle focused on health and livability. A suite of 35 interconnected spreadsheets handle data analysis. In many respects, Mosaic is state of the practice, and is unique in trying to bring together a cost-benefit analysis and values-based analysis using subjective weighting.

In 2013, ODOT and Metro will test Mosaic to verify its processes and outputs. So far, they have found that Mosaic is a very sophisticated tool, but the question is how useful its rich feature set is. In the next few months, a test will be conducted using a fictitious area in the Metro boundary. Mosaic will not be used to test or validate any previous planning work. There is no current intention to mandate the use of Mosaic at any level. A 12-15 person Technical Advisory Committee of staff from different agencies and including TPAC members will be consulted on Mosaic's usefulness. ODOT expects to announce the results of this test by the end of 2013. The project team will update TPAC on the progress on testing and development of Mosaic throughout the year.

Mr. Satvinder Sandhu of FHWA commented that Mosaic could be a useful tool to assess plans in terms of the various goals in the RTP and 2040 growth concept. Doing transportation planning in Oregon means taking into account many factors outside the functionality of the transportation system. The success of Mosaic will be determined by how well it provides answers to the sort of values questions that this approach demands.

7. MAP-21 Implementation: Federal Transit Funding Changes and Designation of Region's Special Needs Transit Funding Administrators – INFORMATION AND RECOMMENDATION

Mr. Ted Leybold of Metro presented on the changes to Special Needs Transit Funding as a result of the implementation of MAP-21. He provided information to frame an upcoming

discussion with TriMet and SMART of whether specific action is required regarding special needs transportation funding.

The following changes to federal programs will affect the region:

- The Alternatives Analysis program has been eliminated. In the future, efforts to develop high capacity transit will rely on local funding sources or other FTA sources.
- The discretionary bus funding program for experimental bus technology has been eliminated and replaced with a program to support bus purchases, available to every agency annually on a formula basis.
- The Job Access Reverse Commute program (JARC) administered by TriMet has been eliminated; the last of those funds are in a grant process right now. These activities can now be funded through the 5307 program, but there is not increased funding to offset the loss of JARC. TriMet is not anticipating continuing to fund JARC programs through 5307, so organizations relying on JARC as a source of funding will experience a transition to no further federal transit funding support for their programs.
- The New Freedom program targeting ADA barriers for people seeking workforce and social integration has been eliminated. These activities can be funded under 5310, the Transportation for Elderly Persons and Persons with Disabilities program, which had funding increased. Additionally, 5310 funds which previously flowed through ODOT will now be administered by an agency to be designated by the Governor. Mr. Leybold suggested that the group discuss TPAC's recommendation for which agencies should receive these funds.

TPAC member discussion included:

- Mr. Eric Hesse of Trimet noted that his agency, CTRAN and SMART has been designated recipients of these funds in the past. TriMet also supplements this federal funding for special needs transit using state funds, and is in discussion with the cities of Forest Grove and Lake Oswego to develop circulators. TriMet's goal is to preserve customer independence while spending less on expensive door-to-door rides. The TriMet board approved its Coordinated Plan for People with Disabilities on January 23.
- Members discussed how rural agencies relate to the changes in the funding structure for special needs transit. The state is also a direct recipient of 5310 FTA funds, and the OTC has $10 million in flex funds that can be directed towards the program. By a formula including passenger miles, operating costs, number of seniors with disabilities, and other values, the state makes an account available to TriMet to distribute via a discretionary grant program to rural areas.
- TPAC recommended that JPACT take up a resolution asking the Governor to designate TriMet and SMART as the recipients of these funds for the Metro region.

8. Transportation Alternatives Funding Administration Transition – <u>INFORMATION AND DISCUSSION</u>

Mr. Leybold updated the group on the changes to the federal Transportation Alternatives (TA) program. In the past, ODOT administered the use of all TA funds; now, ODOT and Metro will share this responsibility. Metro will now administer half of the TA funds available to the region. Currently, ODOT has the ability to add the lesser of $150,000 or 25% to TA projects'

budgets to prevent small cost overruns from derailing the entire project. There are several current TA projects whose design and funding were premised on the availability of the additional funds. Mr. Leybold requested feedback from the group on whether under the new TA structure should continue to include this funding cushion.

TPAC member discussion included:

- Members discussed the reasons behind offering TA projects this flexibility. MTIP and STIP funds do not offer additional funds to prevent problems cause by small budget overruns. In the past, the tool has been a useful way of ensuring on-time projects, and was implemented as a response to federal interest in the issue of project delays.
- TPAC members inquired whether ODOT would be continuing this program. The TA funds flow by year, so projects currently eligible for the cushion funds were awarded funding through 2013, but are in the 150% list for 2014-2015. These changes were introduced after ODOT initiated the combination of TE and bike and pedestrian d; ODOT has not made a decision on whether to hold money aside for these.
- Members suggested that the in the future, Metro administer these funds without the additional flexibility offered by ODOT, but continue to offer it for the projects initiated under the assumption that it would be available.
- TPAC members mentioned that constraining the ability to bridge small funding gaps raises the possibility of half-built projects. If projects get to the point where they can't be built, the federal money allocated for their construction has to be repaid. 25% or $150,000 can be the difference between a successful project and an unbuilt one.

9. ADJOURN

Ms. Deffebach adjourned the meeting at 11:31 A.M.

Respectfully Submitted,

Evan Landman
Recording Secretary

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
1.0	Handout	1/25	Citizen Communication on Non-Agenda Items card and photos	012513t-01
2.0	Memo	1/25	Final List of 2035 RTP Amendment Requests	012513t-02
5.0	Memo	1/25	Air Quality Conformity/Transportation Control Measures	012513t-03
5.0	Handout	1/25	Attachment A: Proposed TCM Substitutions	012513t-04
5.0	Handout	1/25	Attachment B: Draft Schedule for TCM Substitutions	012513t-05
8.0	Memo	1/23	Administration of the Transportation Alternatives funding program	012513t-06

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Metro | *Memo*

Date: March 1, 2013
To: TPAC and Interested Parties
From: Grace Cho, Assistant Transportation Planner
Subject: Air Quality Conformity/Transportation Control Measures - Update

Introduction
At the January 25, 2013 TPAC, DEQ representative Dave Nordberg and Metro staff presented three options in approaching the emerging issue that the region will not meet one of the performance standards for a transportation control measure. These three options are:

1. Defer Action
2. Reprogram Existing Transportation Dollars to Support Transit
3. Undergo a TCM Substitution

At the January 25, 2013 TPAC meeting, members gave approval for Metro staff and DEQ to undergo a TCM substitution proposal to resolve the emerging TCM issue.

Following the approval, DEQ and Metro staff presented some initial substitution options. Of the three options identified by Metro and DEQ, TPAC gave staff the direction to evaluate two of the substitution options. These options are:

1. Combine the three TCMs in one TCM (3-to1) and demonstrate the combined single TCM equal or exceeds a total of 417.3 pounds per day in Carbon Monoxide (CO) emission reduction benefits.
2. Revise the performance standards of the existing TCMs to adjust for the transit service increase TCM shortfall and receive full credit for the bicycle TCM.

TPAC members were not interested in pursuing the third substitution option.

Additionally, another option was identified by TPAC for consideration as a TCM substitution. This option looked to explore how the region may take credit for advancements in transportation technology, including vehicle technology, such as electric and hybrid vehicles.

Update
Metro staff has been working closely with DEQ and EPA to review the different substitution options and begin the CO emissions reductions benefits analysis. In consultation with EPA, the TPAC identified substitution option of taking credit for advancement in transportation technology, was not advised or recommended. The reason provided by EPA and DEQ was that the Metropolitan Planning Organization lacks authority to set vehicle emission standards and has very limited ability to control market-penetration of alternative vehicles.

In moving forward with TPAC's approval to evaluate the CO emissions reduction benefits of two substitution options (combined the three TCMs into a single TCM and revising the performance standards TCM substitution) Metro and DEQ have encountered issues about how to use EPA's new emission factor model to demonstrate the new TCM is at least as effective as the original TCM. Depending on how this issue is resolved, the TCM substitution process could be delayed several months; however staff is exploring if a quicker resolution is possible.

Implications
The potential delay in schedule with implementing a TCM substitution poses a risk of Metro being unable to perform any RTP or MTIP amendments from May 2013 to June 2014 when the next RTP and MTIP are adopted. This leaves project sponsors vulnerable in delivering projects and could ultimately jeopardize the region from receiving federal funds. In recognizing this implication, Metro staff and DEQ are working closely together to develop an alternate strategy.

Next Steps
Metro and DEQ have been in discussions with EPA regarding potential methodology options. TPAC will be provided status updates as new information and further discussion with Metro, DEQ, and EPA progresses. At this time, initial TCM substitution analysis results may come before TPAC in April or May.

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Metro | *Memo*

Date: March 1, 2013
To: TPAC and Interested Parties
From: Tom Kloster, Transportation Planning Manager
Subject: Pre-Conformity Plan and Draft 2035 RTP Air Quality Conformity Determination

Introduction
To comply with federal mandates, Metro is required to conduct an air quality impact analysis with each update of Metro's Regional Transportation Plan (RTP) and development of a new Metropolitan Transportation Improvement Program (MTIP). As part of the conducting the analysis, Metro consults and solicits feedback from our local and regional partners about the analysis. TPAC has been identified as the forum of local and regional partners for consultation and soliciting feedback. Metro staff seeks comments from TPAC regarding the Draft 2035 RTP Air Quality Conformity Determination.

Background
Prior to the scheduled update of Metro's 2035 Regional Transportation Plan (RTP), several project sponsors requested RTP project amendments due to project delivery schedules and are unable to wait until the next scheduled update. As a result, Metro solicited RTP amendments at the end of 2012 where a total of 13 projects were submitted. In review of the proposed amendments, all but one were deemed regionally significant projects as defined federal transportation conformity rules (40 CFR 93.101). Therefore a new air quality conformity determination must be made on Metro's 2035 RTP in complying with federal regulations.

In anticipation of conducting a new conformity determination, Metro staff consulted with federal partners (FHWA, FTA, EPA) as well as regional and state partners (DEQ, ODOT, TriMet) to about the approach and methodology to the air quality conformity analysis. The federal, state, and regional partners all came to agreement on the approach and methodology to the analysis. Metro conducted the analysis in February 2013. Metro staff developed and released a draft 2035 RTP Air Quality Conformity Determination on February 22, 2013 for public comment.

Air Quality Analysis and Results
To demonstrate conformity, the projected emissions must be less than or equal to the motor vehicle emissions budget(s) established for each analysis year (OAR 340-252-0190(b)(A)). In addition, the regional emissions analysis must be performed for the last year of the transportation plan's forecast period. The results for each analysis year can be found below.

Year	Carbon Monoxide Motor Vehicle Emission Budgets (Budgets are Maximum Allowed Emissions) (pounds/ winter day)	Forecast Carbon Monoxide Motor Vehicle Emissions (pounds/ winter day)
2010	1,033,578	877,841
2017	1,181,341	708,286
2025	1,181,341	830,714
2035	1,181,341	835,142

Per the results, the projected emissions is less than the approved motor vehicle emissions budgets for each analysis year. Therefore the 2035 RTP with the proposed amendments conforms to air quality rules. The full report with details of the analysis can be found on Metro's website.

Request
Metro staff requests the feedback of TPAC members on the draft 2035 RTP air quality conformity determination report prior to the end of the public comment period. The public comment period for the 2035 RTP air quality conformity determination is scheduled to close on April 8, 2013.

Next Steps
Metro will summarize and incorporate any public comments on the draft 2035 RTP air quality conformity determination following the close of the public comment period. Metro will return to TPAC in April and ask for recommendation to forward the revised draft of the 2035 RTP air quality conformity determination to JPACT. Once recommended, Metro staff will ask for JPACT and Metro Council approval of the conformity determination at the May meetings.

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Metro | *Memo*

DATE: February 27, 2013

TO: TPAC, MTAC and Interested Parties

FROM: Kim Ellis, Principal Transportation Planner

SUBJECT: Climate Smart Communities Scenarios Project – Phase 2 Investment Choices Scenarios Evaluation

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This memorandum outlines the approach staff will use to evaluate three scenarios for the Climate Smart Communities Scenarios Project during the summer of 2013. Findings from Phase 1, additional Phase 2 work and technical work group and advisory committee discussions have informed development of this approach.

The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.

The analysis will evaluate the effects of distinct land use and transportation policy and investment choices on the future of the Portland metropolitan region. The results of the analysis will be released in October 2013 - launching the third, and final, phase of the CSCS project. Phase 3 will focus using the analysis results to stimulate a regional discussion aimed at deciding which elements from each of the three scenarios should go forward into a preferred land use and transportation scenario for the Metro Council to adopt in December 2014.

The Metro Council, Metro Policy Advisory Committee (MPAC), Joint Policy Advisory Committee on Transportation (JPACT) and community leaders will be asked to support the evaluation approach in May 2013.

ACTION REQUESTED

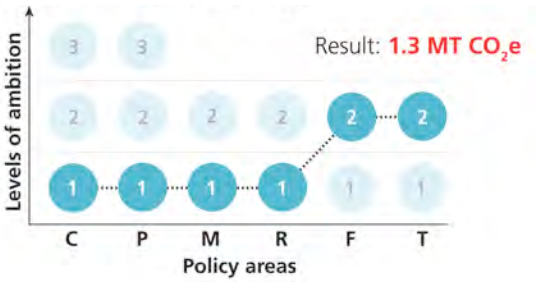
- Discuss the overall approach and provide input on the draft assumptions suggested for each scenario.

OVERVIEW OF PHASE 1 AND 2 – UNDERSTANDING AND SHAPING LAND USE AND TRANSPORTATION CHOICES

Working together with city, county, state, business and community leaders, Metro is researching how land use and transportation policies and investments can be leveraged to help us create great communities, support the region's economy and meet goals for reducing greenhouse gas emissions. The adopted land use plans and zoning of cities and counties across the region are the foundation for the scenarios to be tested, with a goal of creating a diverse yet shared vision of how we can keep this region a great place for years to come – for everyone – and meet state greenhouse gas emissions goals.

Phase 1 focused on understanding the region's choices for reducing greenhouse gas emissions from cars and small trucks. Staff tested 144 different combinations of land use and transportation policies to learn what it might take to meet the region's greenhouse gas emissions reduction target.

More than 90 scenarios met or exceeded the target. In addition, staff found that current plans and policies together with advancements in fleet and technology get the region close to the target. [1]



Current plans and policies together with advancements in fleet and technology get the region close to the state target of 1.2 MT CO_2e per capita.

A range of choices exist to meet the region's state greenhouse gas emissions reduction target and most of the strategies under consideration are already being implemented to varying degrees in communities to achieve other important economic, social and environmental goals.

Staff also conducted sensitivity analysis of the Phase 1 scenarios to better understand the GHG emissions reduction potential of individual strategies.[2 and 3] Assuming adopted community plans and national fuel economy standards, the most effective individual strategies for reducing greenhouse gas emissions were found to be:

- Advancements to **fleet and technology**
- Increased **transit** service
- Increases to the **cost of driving** (e.g., fuel price, parking fees, mileage-based fee, and carbon fee)

The reductions found for each strategy individually do not reflect synergistic benefits that could come from combining various strategies. It is also important to note that while some strategies did not individually achieve significant GHG reductions, such as increasing walking or bicycle mode share or participation in marketing and incentives programs, they remain important elements to complement more effective strategies such as transit service expansion and building walkable downtowns and main streets as called for in community plans. To date, no evaluation has been conducted on the potential financial, political, social equity, environmental or economic implications of the different strategies; these implications will be considered as part of the summer 2013 evaluation.

Phase 2 is focused on shaping future choices for the region to advance implementation of community visions and meet the region's greenhouse gas emissions reduction target. This approach is based on the premise that by helping communities implement their local visions and plans for main streets, downtowns and employment areas, citizens and businesses will experience all the benefits of increased transportation and housing choice, jobs, equity, cleaner air and water, and access to nature along with the added benefit of a reduction in greenhouse gas emissions from cars and small trucks.

To stimulate thinking about our choices for the future and the possibilities they present, three scenarios will be tested in 2013. Findings from Phase 1, additional Phase 2 work and technical work group and advisory committee discussions have informed development of this approach. Staff direction on three scenarios to test will be requested in May 2013. With regional support, staff will move forward with the evaluation, using the agreed upon key outcomes to measure – e.g., economic, fiscal, equity, community and environmental outcomes.

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[1] Understanding Our Land Use and Transportation Choices: Phase 1 Findings (January 2012).
[2] Memo to TPAC and interested parties on Climate Smart Communities: Phase 1 Metropolitan GreenSTEP scenarios sensitivity analysis (June 21, 2012).
[3] Memo to TPAC and interested parties on Climate Smart Communities: Updated Draft Scenario Options Framework (June 26, 2012).

OVERVIEW OF INVESTMENT CHOICES TO BE TESTED IN PHASE 2

Background

The three alternative scenarios to be evaluated are conceptual in nature, and are not intended to represent a preferred scenario or future Metro Council, Oregon Transportation Commission (OTC), local government or TriMet policy intentions. The scenarios to be tested will draw from the policies tested in Phase 1 and bear greater resemblance to realistic, yet ambitious policy alternatives than the 144 scenarios tested in Phase 1 of the project. The proposed approach is consistent with OAR 660-044-0040, which requires the region to evaluate at least 3 scenarios – a reference case scenario that reflects implementation of existing adopted comprehensive plans and transportation plans and at least two alternative land use and transportation scenarios for meeting greenhouse gas reduction targets.

The adopted land use visions (as expressed in local plans and zoning codes) of cities and counties across the region are the foundation for the scenarios to be tested. The analysis will consider transportation investments together with different levels of funding, advancements to clean fuels and vehicle technologies and, to the extent possible, updated community visions identified through the Southwest Corridor Plan, East Metro Connections Plan and local planning and periodic review activities currently. The analysis will inform development of a preferred land use and transportation scenario and identification of the policies, tools, investment and actions needed to implement it. It is important to emphasize that the preferred scenario developed in 2014 will likely include elements from all 3 scenarios tested.

Purpose

The purpose of scenario planning is to test a range of potential futures that reflect choices policymakers, businesses and individuals might make. The CSCS investment scenarios analysis is intended to provide policy makers with better information about the implications and tradeoffs of different land use and transportation policy and investment choices, relative to the region's shared equity, economy, environmental and community goals.

Major objectives of the analysis are to:

- Test distinct investment policy choices that frame the boundaries of the political landscape and public opinion to better understand the effect of different levels of investment on public health, travel behavior, development patterns, equity, the economy, the environment and greenhouse gas emissions.
- Evaluate the relative effect and cost of different investment choices in order to recommend what combinations of investments, tools and strategies are needed to best achieve community visions and state greenhouse gas emissions reductions.
- Provide recommendations to guide development of a preferred land use and transportation scenario.

Research Questions to Answer with Investment Choices Scenarios

The scenarios will help answer policy questions that forecasted growth and fiscal constraints in the region raise about our ability to protect the region's quality of life and economy for current residents and future generations and meet state targets for reducing greenhouse gas emissions, including:

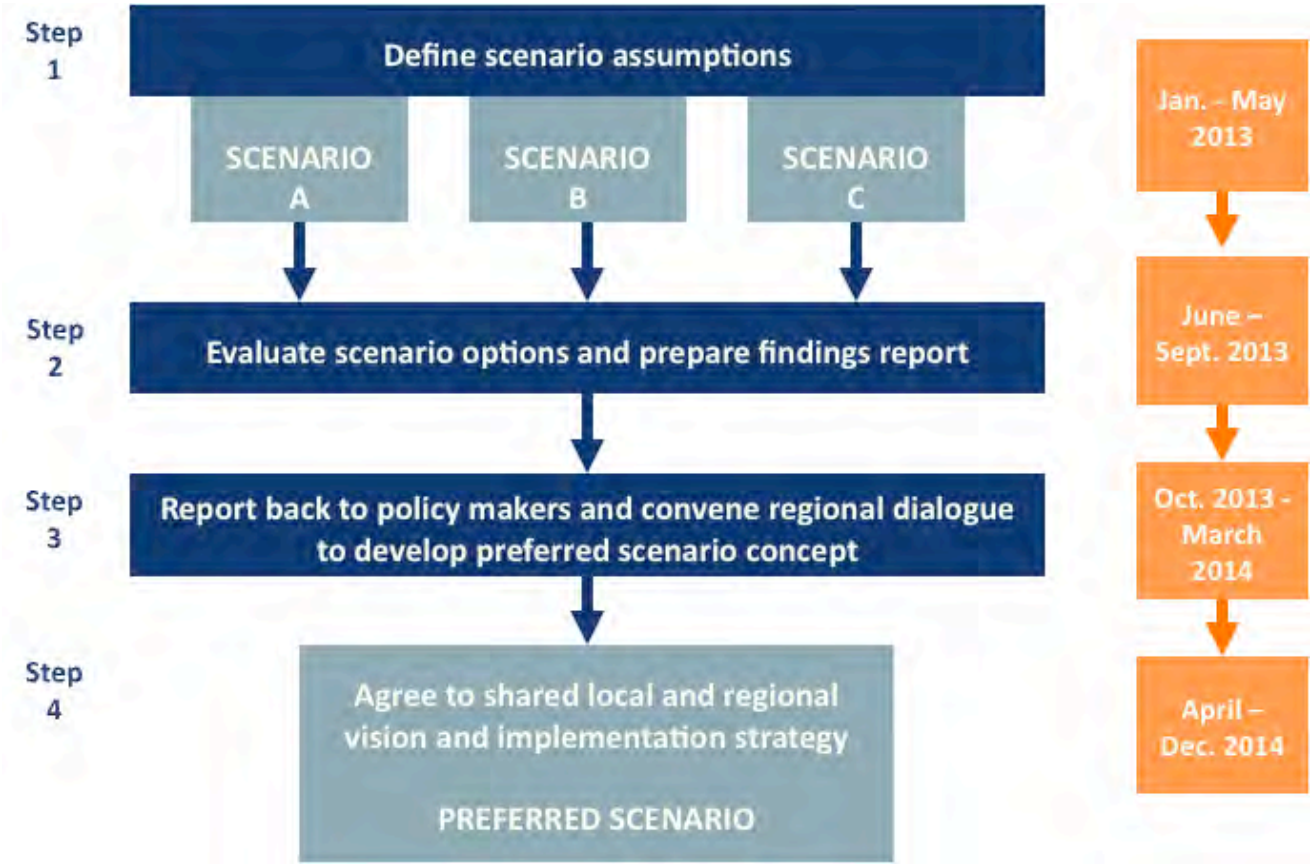
- What will our choices cost and what can we afford?
- Which strategies are most effective for supporting community visions and reducing greenhouse gas emissions?
- What are the risks, opportunities and tradeoffs of our choices – considering public health, social equity, environmental, economic, financial, and political implications?

General Construct and Scope

This analysis will examine three conceptual futures for their ability to serve forecast 2035 population and employment growth and meet state greenhouse gas emissions reduction targets. Each of the three scenarios is based on a "What if" policy-theme focus, resulting in a distinct mix and level of transit service, bike, pedestrian, road, system and demand management strategies that are linked to pricing strategies (revenues) assumed within in each scenario. The three scenarios represent what the region could look like in 2035, if various transportation and land use strategies are pursued, and what it could mean for how we live, how we work and how we get around. The adopted land use plans and zoning codes of cities and counties across the region are the foundation for the scenarios to be tested.

Figure 1 shows the general construct and timeline for this analysis.

Figure 1. Climate Smart Communities Investment Scenarios Construct and Timeline



Each scenario is initiated by a "what if" question:

- **Scenario A (Recent Trends)** - What if we implement adopted plans with existing revenues?

  Purpose: This scenario follows the funding trends of the past decade and shows the results of limiting community investments to existing revenues.

- **Scenario B (Adopted Plans)** - What if we implement adopted plans and raise additional revenues as called for in the adopted Regional Transportation Plan?

  Purpose: This scenario counters recent funding trends and shows the results of investing in a mix of transportation and land use strategies with revenues proiected in the adopted RTP.

- **Scenario C (New Plans and Policies)** - What if we more fully achieve adopted and emerging plans, and pursue new policies and revenues to meet greenhouse gas emissions reduction targets and achieve other goals?

  Purpose: This scenario shows the results of more investment aimed at fully achieving adopted and emerging plans and greenhouse gas emissions reduction targets.

The scenarios are cumulative and for research purposes. The scenarios do not represent future Metro Council, Oregon Transportation Commission (OTC), local government or TriMet policy intentions.

Methodology

MPAC, JPACT and the Metro Council will provide direction on the assumptions to be tested in each of the scenarios. The three scenarios will be developed and evaluated in the summer of 2013 using the Metropolitan GreenSTEP model, GIS analysis and workshops aimed at identifying the action needed to implement each scenario.

Scenario A represents what the future could look like if recent trends continue and we implement adopted plans with existing revenues (e.g., gas tax, payroll tax and existing local sources like urban renewal district (URD), SDCs, TIFs that have been used to fund transportation investments). Scenario A assumes the region continues to rely on existing revenues, which continue to decline in their purchasing power over time due to rising costs, inflation and improved fuel economy of vehicles. In addition, some URD are set to expire between now and 2035. This future would reflect maintaining existing TriMet service with small increases targeted to address overcrowding and delays due to congestion. An implication of limited community investment is that cities and counties are not able to achieve their adopted plans. *This scenario is not expected to meet the greenhouse gas emissions target.*

Scenario B represents what the future could look like if we counter recent trends and are successful implementing adopted plans with additional revenues assumed in the 2035 Regional Transportation Plan. The scenario would assume the adopted RTP levels of transit, road, operations and bike/pedestrian investment, current adopted local land use plans and planned funding as adopted in the RTP (e.g., 1 cent per year gas tax increase, increases to vehicle registration fees, some increase in the payroll tax for transit). In this scenario, TriMet is able to restore and expand frequent bus service in priority corridors, consistent with Service Enhancement Plans. Scenario B assumes the 2035 RTP Financially Constrained System of projects and programs adopted by JPACT and the Metro Council in June 2010. An implication of this scenario is that with significantly more community investment, cities and counties are better able to achieve their adopted plans –as

reflected in the regionally-reviewed 2035 growth distribution adopted by the Metro Council in November 2012. *This scenario may meet the greenhouse gas emissions target.*[4]

Scenario C represents what the future could look like if we are able to fully implement adopted plans (including the full RTP) and additional transit, bike, pedestrian and road investments needed to support new plans such as the Southwest Corridor Plan, East Metro Connections Plan, the Regional Active Transportation Plan, and updated community plans identified through local planning efforts. In this scenario, TriMet is able to further expand frequent and local bus service to more parts of the region with supporting land use. This scenario also reflects a policy area (pricing) that Metro and the region have not examined in great detail and more work is needed to understand the effectiveness and the potential benefits and impacts pricing policies bring, including effects on households of modest means and businesses. This scenario presents an opportunity to test new revenue mechanisms like a bike fee, mileage-based fee or a carbon fee to help fund needed investments that help reduce GHG emissions reductions. This scenario could also be designed to explore using the mileage-based fee to test the effect of transitioning from the state gas tax to a mileage-based fee. *This scenario is expected to meet or exceed the greenhouse gas emissions target.*

Evaluation

While the technical evaluation of the investment scenarios will generate an array of data, the analysis will focus on reporting how each scenario responds to shared concerns about growth in the region as expressed in the Outcomes-Based Evaluation Framework endorsed by the MPAC and JPACT in June 2011. Performance of each scenario will be compared using a set of key indicators being developed based on input provided by business and community leaders in 2012 and early 2013, and the public through an Opt-In opinion survey. [5] The evaluation will consider public health, social equity, environmental, economic, financial, and political implications associated with each scenario.

Planning-level cost estimates for each scenario will be developed by Metro, in partnership with ODOT and TriMet. In addition, project staff will convene workshops as part of the evaluation to identify feasibility and actions needed to implement the scenarios being evaluated.

The Investment Choices Scenarios Analysis is intended to be a starting point for developing a recommended land use and transportation scenario that meets the state greenhouse gas emissions reduction target. The understanding gained through this analysis will guide the design and analysis of a preferred scenario in Phase 3 of the project.

OVERVIEW OF PHASE 3 - DEVELOPMENT AND SELECTION OF A PREFERRED LAND USE AND TRANSPORTATION SCENARIO

Phase 3, the final phase of the process, will begin in Fall 2013 with release of the scenarios analysis results. The results of the analysis will be reported using an Outcomes-Based Evaluation Framework being refined by Metro staff based on input provided during a series of workshops and focus groups held with community leaders working to advance public health, equity and environmental justice, protection of the environment and economic prosperity in the region.

Release of the findings will kick-off a broader regional discussion aimed at identifying which policies, investments and actions should be included in a preferred scenario - likely drawing elements from each of the three scenarios tested in Phase 2. Policy recommendations that result

[4] The regionally-reviewed growth distribution will be used in this analysis. A draft distribution was used in Phase 1. In addition, the RTP financially constrained system state gas tax increase assumption of 1 cent per year increase was not fully evaluated in Phase 1. It was assumed in the Level 2 pricing assumptions as a mileage-based fee. Many of the Phase 1 scenarios with Level 2 pricing met or exceed the state greenhouse gas emissions target.

[5] A series of scorecard workshops and business focus groups and an Opt-In survey will inform refinements.

from this discussion will provide direction to Metro, ODOT, TriMet and local agency staff on the draft preferred scenario to be analyzed in Spring 2014. A draft preferred scenario concept is anticipated by March 2014 to allow sufficient time to meet state timeline and scenario selection requirements.

A final preferred scenario is required to be selected by the end of 2014 after public review and consultation with local governments and state and regional partners. The preferred scenario will be implemented through amendments to Metro's Regional Framework Plan and 2040 Growth Concept in December 2014 and Metro's functional plans and local comprehensive plans, land use regulations and transportation system plans through future actions as defined by Oregon Administrative Rules adopted by the Land Conservation and Development Commission.[6]

TIMELINE

The timeline for the scenarios analysis and final adoption of a preferred scenario meets OAR 660-044-0040:

February - May 2013	Metro Council, MPAC, JPACT review investment choices scenarios construct and outcomes-based evaluation framework
May 2013	Metro Council, MPAC, JPACT confirm policy and investment choices to be tested, research questions and outcomes to be addressed in analysis
June-August 2013	Project staff and technical work group analyze investment scenarios using Metropolitan GreenSTEP
	Convene workshops to identify feasibility and actions likely to be necessary to implement scenarios
August-September 2013	Project staff and technical work group report analysis results in CSCS Investment Choices Findings Report
October 2013	Staff release CSCS Investment Choices Findings Report for regional discussion; begin phase 3
March/April 2014	MPAC, JPACT and Metro Council confirm draft preferred scenario concept
April-July 2014	Consult with local governments, and state and regional partners on draft preferred scenario concept and implementation strategies
	Analyze draft preferred scenario using the regional travel demand model and Metropolitan GreenSTEP
Summer 2014	Project staff prepare adoption package for public comment period
Fall 2014	45-day public comment period on adoption package
December 2014	MPAC and JPACT recommendation to the Metro Council on the preferred land use and transportation scenario
	Metro Council adopts preferred land use and transportation scenario

[6] OAR 660-044-0040 and OAR 660-044-0045.

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

DRAFT

February 26, 2013

Shaping our choices for the future – a starting point for gathering input on what choices to test

A scenario is an example of what the future might look like based on the choices we make today. The three scenarios presented are intended to serve as a starting point for gathering input on what choices should be tested in summer 2013.

An analysis of the scenarios will stimulate a discussion about our choices for the future and the possible impacts they may have on how we live, travel, work and invest in our communities. Working together, cities, counties and regional partners will decide which elements from each of the three scenarios should go forward into one preferred scenario for the region to adopt in December 2014. Considerations for developing a preferred scenario will include: costs and benefits across public health, environmental, economic and social equity outcomes, financial implications, public support and political will.

The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.

NOTE: The scenarios are cumulative and for research purposes. The scenarios do not represent future Metro Council, Oregon Transportation Commission, TriMet or local government policy intentions.

WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Purpose	This scenario follows the funding trends of the past decade and shows the results of limiting community investments to existing revenues.	This scenario counters recent funding trends and shows the results of investing in a mix of transportation and land use strategies with revenues projected in the adopted Regional Transportation Plan.	This scenario shows the results of more investment aimed at fully achieving adopted and emerging plans and GHG emissions reduction targets.

LESS INVESTMENT AND POLICIES MORE

FLEET AND TECHNOLOGY ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Fleet and technology	Target rulemaking assumptions will be used for all three scenarios.		

Vehicle and Fuel Characteristics	Target Rulemaking Assumption
Auto fuel economy (miles per gallon)	68
Light truck fuel economy (miles per gallon)	48
Auto fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon)	81
Light truck fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon)	56
Proportion of autos that are plug-in hybrids or electric vehicles	8%
Proportion of light trucks that are plug-in hybrids or electric vehicles	2%
Plug-in hybrids battery range (miles)	35
Electric vehicles battery range: auto and light truck (miles)	175
% reduction in fuel carbon intensity from current levels	20%
Electric power sources compared to current Renewable Portfolio Standard	Meet
Average vehicle replacement rate (years)	8

LAND USE ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Land use plans and zoning	Local land use plans and zoning as adopted by cities and counties for downtowns, main streets and employment areas will be the same for all three scenarios.		
Growth captured in UGB	TBD	As reflected in 2035 Regional Growth Distribution adopted by the Metro Council in November 2012.	Southwest Corridor Plan land use vision and other city and county planning efforts underway (if available).
Public/private investment	TBD		TBD

See reverse for more information

NOTE: The scenarios are cumulative and for research purposes. The scenarios do not represent future Metro Council, Oregon Transportation Commission, TriMet or local government policy intentions.

DRAFT

WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

February 26, 2013

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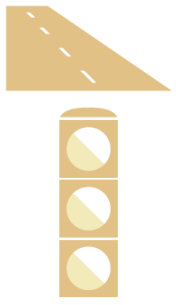
TRANSPORTATION ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Transit 	**Operations and maintenance** ▪ Maintain existing TriMet service with small increases targeted to address overcrowding and delays due to congestion ▪ Implement SMART and C-TRAN plans **Capital** ▪ Extend MAX to Milwaukie ▪ Powell/Division BRT ▪ Extend MAX to Vancouver, WA ▪ Close Portland streetcar loop	**Operations and maintenance** ▪ Restore and expand frequent bus service in priority corridors, consistent with Service Enhancement Plans **Capital** ▪ Streetcar extension along priority corridors ▪ Additional transit priority and pedestrian/bike access to transit projects	**Operations and maintenance** ▪ Expand frequent bus service coverage to all major arterials with supporting land use connecting regional and town centers, consistent with TriMet Service Enhancement Plans ▪ Expand local bus service coverage and connections to frequent bus service and high capacity transit, consistent with TriMet Service Enhancement Plans **Capital** ▪ Cascadia rail connections to Eugene, Salem and Vancouver B.C. ▪ High capacity transit: Southwest Corridor and AmberGlen ▪ WES service frequency improvements ▪ Bus rapid transit serving I-205 and Tualatin-Valley Highway corridors ▪ Other Portland streetcar extensions ▪ Additional transit priority and pedestrian/bike access to transit projects
Streets and highways 	**Operations and maintenance** ▪ Fall behind on fixing potholes and repairs ▪ Implement 50% of regional TSMO strategic plan to achieve 10% delay reduction **Capital** ▪ I-5 Bridge Replacement ▪ 2016-18 STIP and MTIP projects	**Operations and maintenance** ▪ Keep up with fixing potholes and repairs ▪ Implement full regional TSMO strategic plan to achieve 20% delay reduction **Capital** ▪ Adopted RTP including: I-5 Bridge Replacement, Sunrise Project from I-205 to 172nd Avenue, US 26 widened to 6 through lanes to Cornelius Pass Road and interchange improvements at US 26, OR 217, I-205, Troutdale/I-84 and I-84/I-5	**Operations and maintenance** ▪ Keep up with fixing potholes and repairs ▪ Expanded TSMO strategic plan achieves 35% delay reduction **Capital** ▪ I-5/OR 217 interchange (Phase 2) ▪ State RTP project list
Bike and pedestrian 	▪ Investments are limited with no dedicated funding; X% of regional system completed ▪ Complete 2016-18 STIP and MTIP projects	▪ Complete adopted RTP bike and pedestrian projects; X% of regional system completed	▪ Complete 100% of regional bike and pedestrian networks, including regional trails, further targeting short trips and access to transit and centers

EDUCATION AND INCENTIVES ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Education and incentives 	▪ 10% of households practice ecodriving and participate in travel options programs ▪ 20% of employees participate in commute programs ▪ 1% of households participate in car-sharing ▪ 10% of vehicle owners use pay-as-you-drive insurance	▪ 20% of households practice ecodriving and participate in travel options programs ▪ 20% of employees participate in commute programs ▪ 2% of households participate in car-sharing ▪ 10% of vehicle owners use pay-as-you-drive insurance	▪ 40% of households practice ecodriving and participate in travel options programs ▪ 40% of employees participate in commute programs ▪ 4% of households participate in car-sharing ▪ 10% of vehicle owners use pay-as-you-drive insurance

PRICING ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Pricing 	**Existing revenues at 2012 levels** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ State gas tax = 30 cents/gallon ▪ Local gas tax = 1-2 cents/gallon Vehicle travel fees ▪ I-5 Bridge toll **Other transportation fees** ▪ Payroll tax and farebox recovery ▪ Parking fees in downtown Portland, OHSU campus and the Lloyd district ▪ Other federal, state and local revenues at existing levels	**Revenues assumed to fund adopted RTP** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ State gas tax = 55 cents/gallon ▪ Local gas tax = 1-2 cents/gallon Vehicle travel fees ▪ I-5 Bridge toll **Other transportation fees** ▪ Payroll tax and farebox recovery ▪ Parking fees in more locations served by high capacity transit ▪ Other federal, state and local revenues at RTP levels	**New and expanded revenues** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ Carbon fee = $20-50/ton ▪ Local gas tax = 1-2 cents/gallon **Vehicle travel fees** ▪ I-5 Bridge toll ▪ VMT fee = $.03-.15/mile **Other transportation fees** ▪ Payroll tax and farebox recovery ▪ Parking fees in new locations served by high capacity transit ▪ Bicycle fee

Metro

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT



The Road to 2040

Choices for our future

Nearly two decades ago, the residents of this region set a course for growth with the adoption of the 2040 Growth Concept – a plan for how the region grows over the next 50 years.

The vision for 2040 calls for each community to decide the best way to create vibrant downtowns, provide good jobs, and offer affordable housing and transportation choices for its residents. Together, these community visions encourage growth in downtowns, main streets and employment areas, and preserve farms, forestland and natural areas. They help build a strong regional economy, while celebrating and strengthening individual local character.

Shaping the region with intention

The desired outcome of this shared vision is a region where people live, work and play in healthy communities with easy access to everyday needs. Where safe and reliable transportation choices connect people to jobs and goods to market. Where current and future generations benefit from the region's sustained economic competiveness and resilience. Where everyone enjoys clean air, clean water and a healthy ecosystem. And where the benefits and costs of growth and change are equitably shared among all communities.

The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.

How we get there is up to you.

Shared values for livable communities guide our policy and investment choices to create a unique sense of place and quality of life that attract people and businesses to the region and inspire generations to call this place home.

Leadership on climate change

Because we have focused development where it makes sense – in downtowns, main streets and employment areas – and invested in transportation choices, we drive 20 percent fewer miles every day than other regions of a similar size.

By taking direction from the 2040 plan and working together with local communities as they develop and update community visions, we can grow in a more sustainable manner that reduces greenhouse gas emissions from transportation and improves the environment for healthier, more livable communities.

But there's more to be done.

MAKING A GREAT PLACE

Metro

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

WE ALL HAVE CHOICES TO MAKE

The choices we make today will determine the future of the Portland metropolitan region. While we have worked together to create strong local communities and a region with an enviable quality of life, today's uncertain economy, limited resources, rising energy costs and a growing and diverse population have brought new challenges.

In collaboration with city, county, state, business and community leaders, Metro is researching how investments and transportation and land use policies can be leveraged to respond to these challenges and meet climate goals.

Scenario planning

To stimulate thinking about our choices for the future and the possible impacts they may have on how we live, travel and work, three scenarios will be tested in 2013 to help answer the questions:

- What will our choices cost and what can we afford?
- Which strategies are most effective for supporting community visions and reducing greenhouse gas emissions?
- What are the risks, opportunities and tradeoffs of our choices?

WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

Scenario A
RECENT TRENDS — $

This scenario follows the funding trends of the past decade and shows the results of limiting community investments to existing revenues.

How we live
Developers provide some new housing choices near transit and downtown areas.

How we get around
Streets in my community need repair. I often drive because transit is not available in my neighborhood. There are limited new pathways for biking and walking to get me to transit.

How we work
I look for ways to lower the fuel operating costs for my business while maintaining my delivery schedule and serving customers.

How we invest
We rely on existing revenues, many of which are declining (e.g., gas tax, payroll tax, federal funds). We spend an increasing share of that revenue on maintaining what we have.

What is a scenario?

A scenario is an example of what the future might look like, based on the choices we make today.

The scenarios presented are intended to serve as a starting point for gathering input on what choices should be tested in 2013.

Scenario B
ADOPTED PLANS — $$

This scenario counters recent funding trends and shows the results of investing in a mix of transportation and land use strategies with revenues projected in the adopted Regional Transportation Plan.

How we live
My community provides more housing choices, jobs and services near transit.

How we get around
Streets, highways and transit systems in my community are in good repair. Targeted investments make it easier to walk, bike or take transit to work and to meet my everyday needs.

How we work
I build on past cost saving measures to invest in new technologies and cleaner fuels to support my delivery and business needs.

How we invest
We partner with nearby city, regional and state leaders to increase existing revenues to properly maintain and expand streets, highways, transit, sidewalks and bike pathways.

Scenario C
NEW PLANS AND POLICIES — $$$

This scenario shows the results of more investment aimed at fully achieving adopted and emerging plans and greenhouse gas emissions reduction targets.

How we live
More young people, seniors and families live close to services and transit because of the convenience this offers. I live close to where I work and can choose to drive or take another way.

How we get around
Streets, highways and transit systems in my community are in good repair. I can easily walk, bike and take transit to work and to meet my everyday needs.

How we work
I reinvest cost savings to create more jobs and further shift operations toward energy efficiency for my business and delivery needs.

How we invest
We work together with business and community leaders to find new ways to fund maintenance and make new investments in streets, highways, transit, sidewalks and bike pathways.

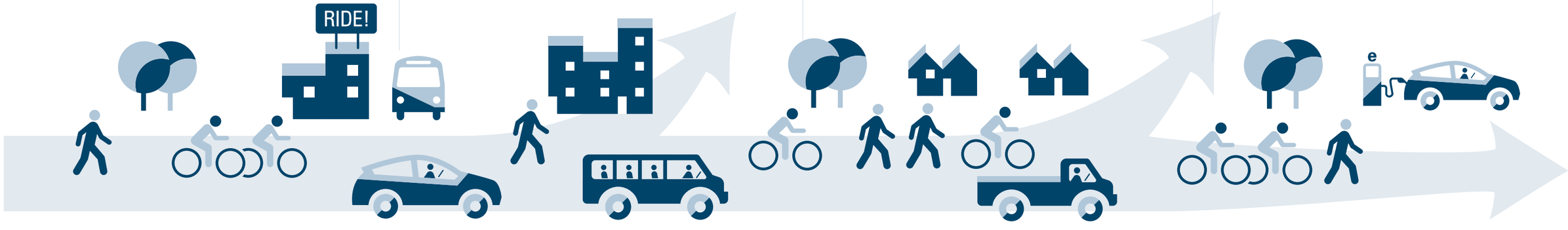
CLIMATE SMART COMMUNITIES SCENARIOS PROJECT TIMELINE

UNDERSTAND CHOICES
2011-12
Research how strategies could impact community outcomes and GHG emissions

SHAPE CHOICES
Jan.-Sept. 2013
Develop and evaluate scenario options to learn how choices today impact our communities tomorrow

SHAPE PREFERRED SCENARIO
Oct. 2013-March 2014
Report back to communities and develop a preferred scenario

SELECT PREFERRED SCENARIO
April-Dec. 2014
Adopt a preferred land use and transportation scenario





About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together, we're making a great place, now and for generations to come.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/connect

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New challenges call for new choices

What choices are you willing to make to respond to these challenges?

Clean fuels and technology
How can the region support state and federal efforts to transition to clean fuels and technology?

Community investment
How do we pay for investments needed to realize our shared vision for walkable communities, job creation, and affordable housing and transportation choices?

Transit
How much frequent transit should the region provide and what areas should be a priority? What other investments are needed to complement this strategy?

optin ONLINE PANEL

Join Metro's online opinion panel today at **www.optinpanel.org** and be entered to win a $100 gift card.

LOOKING AHEAD

Developing a preferred scenario

Working together, cities, counties and regional partners will decide which elements from each of the three scenarios should go forward into one preferred scenario for the region to adopt in December 2014.

Considerations for developing a preferred scenario include:

- costs and benefits across public health, environmental, economic and social equity goals
- financial implications
- public support and political will.

www.oregonmetro.gov/climatescenarios